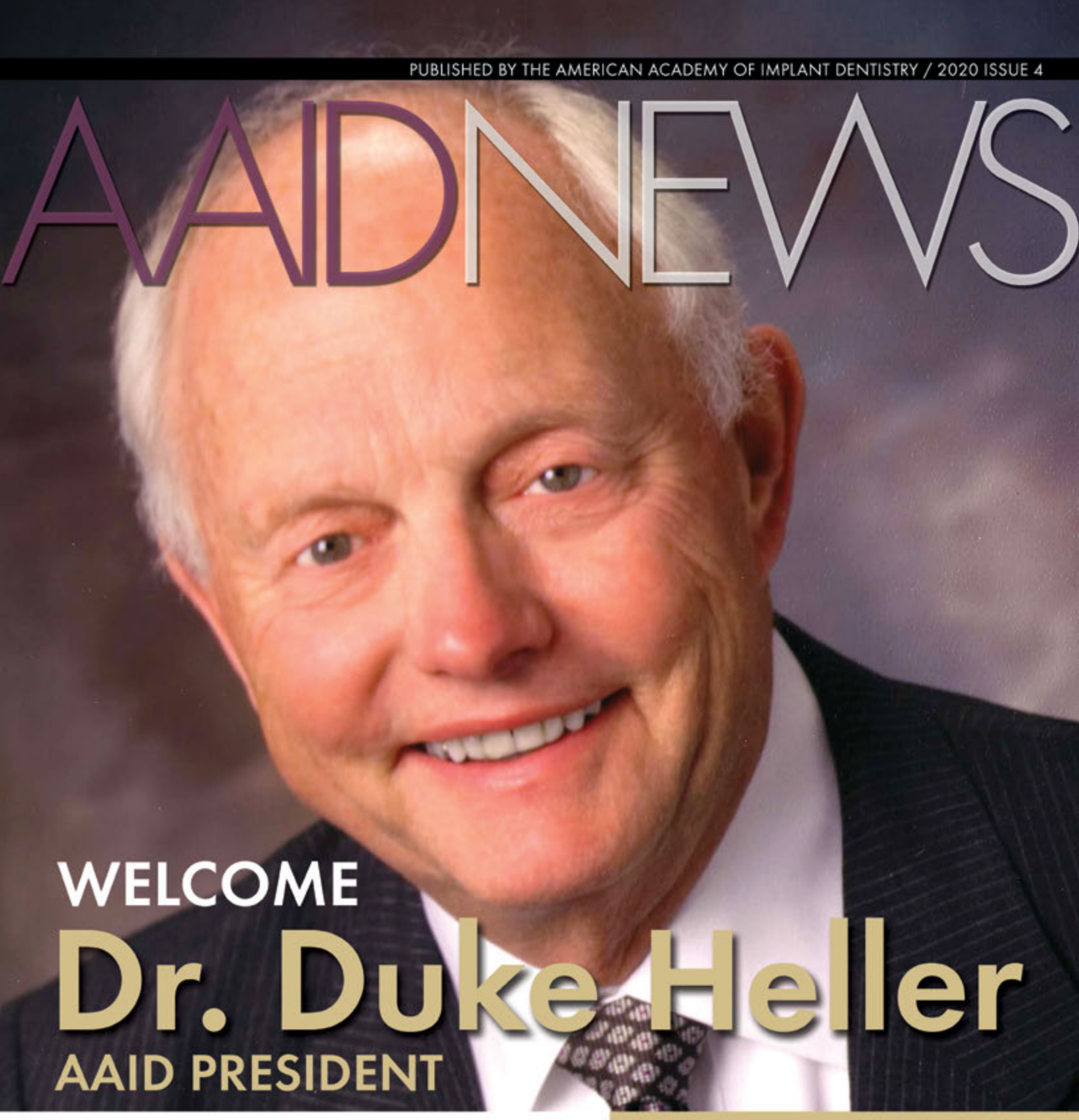
PUBLISHED BY THE AMERICAN ACADEMY OF IMPLANT DENTISTRY / 2020 ISSUE 4

AAID NEWS



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AAID PRESIDENT

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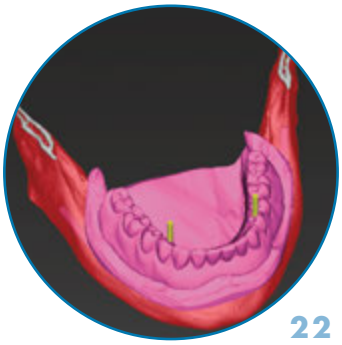
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AAID
AMERICAN ACADEMY OF IMPLANT DENTISTRY

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aaid.com

Lead Stories

AAID News

Dennis Flanagan,
DDS, MSc, FAAID, DABOI/ID

EDITOR'S NOTEBOOK

In This Era of Distrust, Now Is the Time to Explain Your Credentials

The year 2020 was one of expert scientists explaining the pandemic. At the outset, scientists told us that wearing masks and social distancing were not needed and politicians then minimized the virus infection rate and severity. In a turnabout, masks and social distancing became necessary. Scientists seemed to be influenced by a political agenda. Thus, after all the events of the past year, the public may decide to not trust scientists. Dentists have for many years been at the top of the list of trusted members of society. We need to ensure we stay on top of that list. We can start by explaining ourselves.

Now is the time to explain your credentials which are qualifications of achievement that state your background and suitability to perform a given task. We have that in the AAID in the form of Associate Fellow (AFAAID) and Fellow (FAAID). Irrespective of any political body that does not recognize our specialty status, the facts remain that our credentials, Associate Fellow, Fellow or Diplomate (with the American Board of Oral Implantology/Implant Dentistry), requires passing a written exam, passing an oral exam, and passing an inspection of treatment we have rendered. These facts should be explained to counter any question as to any recognition status. We have successfully passed thorough examinations of our surgical and prosthetic skills and we are competent in performing these procedures.

We need to maintain and advance our credibility with the public and our patients, especially in this era. The diligent work that goes into attaining an AAID credential is substantial. It shows that we care about the status of our specialty. We care about increasing our knowledge base for treatments. We care about how we are viewed by the public. So now is the time to explain our credentials to the public. Explaining the AFAAID/FAAID credential develops trust and builds confidence from that patient and can increase case acceptance.

In the era of distrust, my fear is that the public will lose respect for our evidence-based judgements and treatment plans. I believe that we need to counteract any erosion of our public trust.

We need to maintain and advance our credibility with the public and our patients, especially in this era. The diligent work that goes into attaining an AAID credential is substantial. It shows that we care about the status of our specialty.

My name is Dennis Flanagan and I am excited to serve as the new editor for AAID News. In my real life, I am the managing partner of a private group practice with 35 employees and have placed more than 10,000 dental implants.

Here are some of my other credentials:

- *Graduate of Georgetown University School of Dentistry (DDS) and the Goethe Medical University, Frankfurt Germany (MSc in oral implantology)*
- *Diplomate of the American Board of General Dentistry (ABGD), International Congress of Oral Implantology (ICOI) and the American Board of Oral Implantology/Implant Dentistry (ABOI/ID)*
- *AAID Honored Fellow and Fellow of the Academy of Osseointegration*
- *Examiner for the AAID, ABOI/ID, and the ABGD*
- *Attending Dentist for the U.S. Olympic Committee*
- *Former chief of Dentistry at Windham Community Memorial Hospital*
- *Tenured associate professor in dental medicine at Lugano University of Switzerland, Malta*
- *Published more than 120 articles about dentistry*
- *Senior associate editor for the* Journal of Oral Implantology
- *Former editorial consultant to the Academy of Osseointegration and former editor for Oakstone Medical publishing*

I am looking forward to serving as the new AAID News *editor. Please reach out to me at* editor@aaid.com.

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Bernee Dunson,
DDS, FAAID, DABOI/ID
2020 AAID President

PRESIDENT'SMESSAGE

Choosing mentors, learning skills, treating patients

Over the years, I have had the pleasure of learning from many top clinicians. One of my mentors is Dr. O. Hilt Tatum, Jr. For more than 50 years, he has pioneered the field of implant dentistry and developed his approached through the concept of "NIRISAB".

NIRISAB is "Natural Implant Restoration in Stable Alveolar Bone". It is a philosophy or a concept about approaching the end goal of restoring a patient to normal contours, esthetics, speech, and health, regardless of the degree of atrophy, disease, or injury to the stomatognathic system.

Dr. Tatum explains that he arrived at this name simply because every word collectively and independently takes on an important meaning for the field of implant dentistry. "Natural Implant Restoration" is obvious because the goal for implant dentists should be to have the final prosthesis appearance and function as natural as possible.

Alveolar bone is crucial to this success because it possesses the genetic coding to allow for greater predictability of integration, functional load capacity and long-term stability, therefore providing meaning to the latter part of the NIRISAB name, "Stable Alveolar Bone." The last half of this concept includes but is not limited to sinus grafting (lateral wall subantral augmentation), bone expansion (compaction and manipulation), soft tissue grafting, bone grafting through remote incisions, vascularized segmental osteotomies and nerve lateralization.

When evaluating patients, it is important to take the time to listen and understand how they see the outcome. I like to use NIRISAB as a way of treatment planning because it helps me see the entire process from planning to restoration. It is the gold standard in patient care for implant cases. (If you'd like to see the case study, go to the AAID website at aaid.com/news/)

I look at the wholeness with NIRISAB and believe it can be translated to all of our cases. As practitioners, we should ensure that our patients are treated with the utmost respect and care. This notion is how I treat everything in my life. At the beginning of my tenure on the AAID Board of Directors, it was my goal to achieve a unified curriculum-approved residency program that would allow us to take the educational platform (including credentialing) to a higher level to multiple universities and institutions of higher learning throughout the country. This new platform for education in a residency setting will help us gain our ultimate goal of specialty status. Additionally, to compete with ever-evolving academia, the AAID is working toward an executive-level training program geared specifically for the work schedules of elite professionals. It is modeled after the accessibility and flexibility typical to that of the popular Executive MBA. There are many volunteers within the Academy that are working to make this happen. I look forward to watching the progress of these programs.

Becoming a leader was a natural progression in my desire to bring the implant practice to more dentists. I believe that our organization will become the leader in educating all dentists about implants from surgical to restorative issues. I look forward to working with Dr. Duke Heller on moving that needle closer to implementation of these programs. The AAID is what it is today because of those who have come before us. We must continue on this path putting the organization in the best positive light.

Thank you for allowing me to serve the American Academy of Implant Dentistry as AAID President.

When evaluating patients, it is important to take the time to listen and understand how they see the outcome. I like to use NIRISAB as a way of treatment planning because it helps me see the entire process from planning to restoration.

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Taylor Manalili, DDS
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1. American Dental Association Health Policy Institute. COVID-19: Economic Impact on Dental Practices. Biweekly poll. Wave 14 — week of September 21, 2020.

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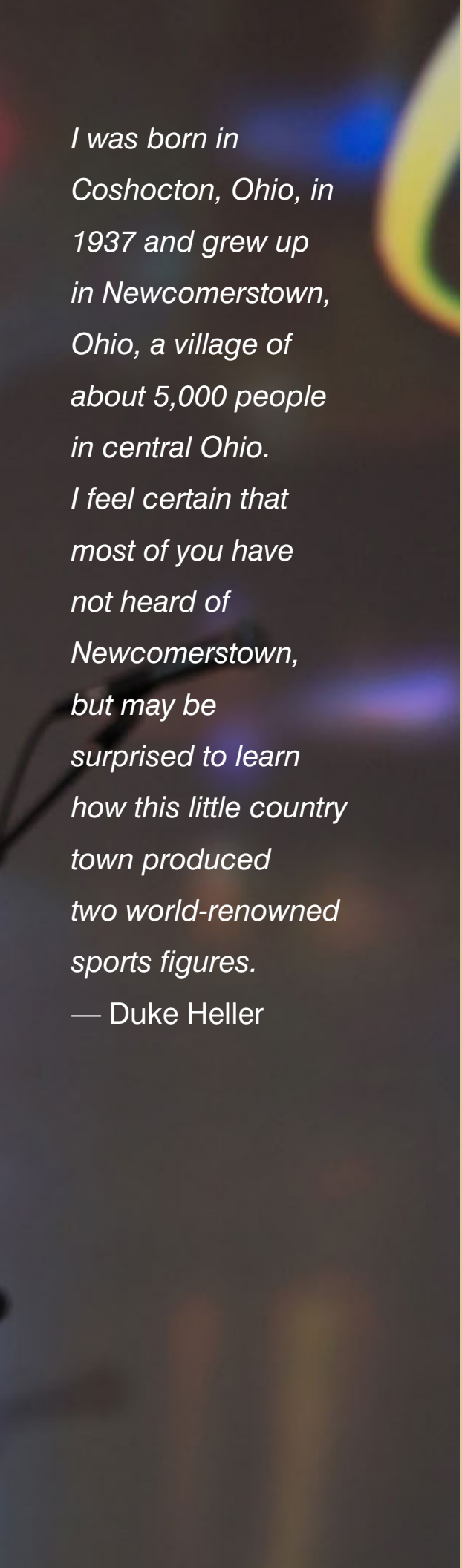
WELCOME
Dr. Duke Heller
AAID PRESIDENT

By Dennis Flanagan

Dr. Rob Heller presents his dad, Dr. Duke Heller, with the Gershkoff/Goldberg Award in 2017.



I was born in Coshocton, Ohio, in 1937 and grew up in Newcomerstown, Ohio, a village of about 5,000 people in central Ohio. I feel certain that most of you have not heard of Newcomerstown, but may be surprised to learn how this little country town produced two world-renowned sports figures.
— Duke Heller

Growing up with Woody

Mrs. Hayes was my babysitter when I was 10 years old. Her husband was the superintendent of the high school. She had a son named Woodrow Hayes. You may know him as Woody Hayes, The Ohio State University (OSU) Football coach for 28 years. In dental school, I had the pleasure of working with him as the "Dentist for the OSU athletic department." In 1961, Woody and his team were co-National Champions with Alabama. I also had the privilege to work with the 1961-62 OSU basketball team with Jerry Lucas, John (Hondo) Havlicek, Larry Siegfried, Mel Nowell and others. That team won the national basketball championship in 1960 and finished runner up in 1961 and 1962.

Baseball greats

The second famous person from Newcomerstown was Denton Young better known as "Cy." Yes, the Cy Young for whom the Cy Young Award was named. It is given to the best pitcher in Major League Baseball. He would come to town riding a tractor or a plow horse. When I was 11 or 12 years old, we would sit in the barber shop and listen to stories about Ty Cobb, Honus Wagner, Babe Ruth, Lou Gehrig, and other legends of baseball.

Dennis Flanagan: Where did you attend college and dental school?
Duke Heller: I graduated from Newcomerstown High School in 1955, attended OSU for undergraduate school, and the OSU College of Dentistry, graduating in 1962.

DF: What did you do after graduating from OSU dental school?
DH: After dental school, my wife, Wanda, and I went into the U.S. Army Dental Corp at Fort Rucker, Alabama, until 1965 when I set up a general practice in Columbus. While in the service, I had the opportunity to meet Dr. L.D. Pankey. I would take vacation time to watch Dr. Pankey in his office perform full-mouth rehabilitation. I learned how to talk with patients, understand their issues, and then treat those concerns. Dr. Pankey was so helpful to me as a young dentist. I sought him as a mentor. This relationship lasted more than 30 years.

DF: You started private practice in 1965; what got you interested in implant dentistry?
DH: In 1969 I took my first dental implant course from Dr. Leonard Linkow at Detroit Dental School. The implant course on Friday was a lecture, and I placed my first implant the following day, Saturday. Dr. Linkow did one side, I did the other side. Of course they were blade implants. The right side is still there after 51 years. We modeled the Midwest Implant Institute after that experience. Dentists would assist me doing surgery, and then staff would assist the doctor while I watched over their shoulder. My staff assisted their staff.

From 1972 to 74, I attended graduate school in endodontics at the OSU dental school. My mission was to do research on dental implants. Out of that study came Tricalcium Phosphate (TCP) and a ceramic Implant "Synthodont."

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COVER STORY

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DF: You must love teaching as you and Dr. Jack Hahn started the Midwest Implant Institute!

DH: In 1980, I co-founded with Dr. Jack Hahn the Midwest Implant Institute, which was the first hands-on teaching program in the United States. Doctors from outside Ohio could obtain a "temporary Ohio" license that allowed them to bring patients to Ohio and perform surgery and implant prosthetics under our supervision. More than 2,800 dentists have been through the Midwest Implant Externship program. Each extern places 10 to 12 implants and learns bone grafting techniques and how to dig out of problems that may arise. Many of the Midwest Implant Institute externs are still very active in the AAID. I had the privilege of practicing with my son, Dr. Rob Heller, for 25 years. Rob has taken the Midwest Implant Institute to greater heights than I ever envisioned. Other than Dr. Hilt Tatum, Jr., my son Rob is the most skilled dental surgeon I have ever observed.

DF: How many years did you practice dentistry?

DH: I practiced dentistry for 53 years, 49 of which were spent serving my patients with dental implant-supported prosthesis. I have been privileged to lecture worldwide, serving dentists who want to learn basic implant dentistry as well as advanced implant surgery and prosthetic dentistry. I thank Dr. Shankar Iyer for making it possible for me to teach for many years in foreign countries.

DF: When did you retire?

DH: In 2015, I retired from doing surgery and only lectured. I am still on the faculty of the SUNY school of dentistry in Buffalo, New York, teaching with Dr. Bob Buhite. I still occasionally help my son by observing his students place implants and sometimes speak at his courses.

DF: How long were you married?

DH: Wanda and I were married 60 years and were together seven years prior. We have three children, nine grandchildren, and three great grandchildren. After 67 years together, Wanda went home to be with the Lord on March 26, 2019. I was devastated by losing her.

Dr. Heller and along with his wife, Wanda, at the 2017 Annual Conference.

My mantra for 2021 is education. I want to see the AAID become known for introducing young dentists to implant dentistry by pursuing a three-pronged approach.

DF: How did you get involved in the leadership of the AAID, especially becoming president this year?
DH: In 2019, Dr. Hilt Tatum called and asked if I would consider running for president-elect of AAID as he believed that my being an officer would benefit the Academy. There was a lot of conflict in the AAID at that time and it was felt I might bring peace to the organization. I consulted with my daughters Kerry and Jenny, son Rob, my Pastor, and some close friends. Since it was a three-year commitment, it could not be taken lightly. In November 2019, I was elected president-elect and November 2020 became AAID president. It is a great honor to help the Board of Trustees serve the AAID members.

DF: What would you like for the Academy to accomplish during your tenure as President?
DH: My mantra for 2021 is education. I want to see the AAID become known for introducing young dentists to implant dentistry by pursuing a three-pronged approach:

1. **MaxiCourses** have a longstanding importance in the growth of the AAID. I would like to see more MaxiCourse® education realized since attendance produces the most AAID Members. In addition to the existing programs, I would like to strategically add two domestic locations and two International locations. Additionally, the MaxiCourse brand will be further strengthened by standardizing some of the curriculum as well as operational logistics. Dr. Bill Liang, current chairman of the Maxi-Course Directors, will be the driving force in this effort.

2. **Multiple Residency Programs** Implementation of the Jacksonville University Comprehensive Oral Implantology Residency Program, which is a three-year, full-time university-based certificate program. The 93 credit-hour program will hopefully lead to a Master of Science and be divided between a multi-center research curricula, collaborative online didactic courses, and hands-on surgical and prosthetic training under the tutelage of ABOI/ID Diplomates at Jacksonville University Program locations within the United States. Credentialed AAID members will have access to all training videos. Dr. Andy Burton, Dr. Hilt Tatum, and Dr. Andrew MacConnell will be implementing this program.

   The course will be comprehensive and teach all methods known to implantology, including many techniques not presently being taught anywhere in the world. This will support the case for specialty status in implantology and support the standardization of comprehensive oral implantology education.

3. **Residency Masters Programs** Dr. Jim Rutkowski and Dr. Shankar Iyer are developing Master of Arts and Master of Science curricula that can be applied to standardize university and hospital-based dental implant residency programs. AAID's presence in universities is vital for specialty status. These programs will help create a firm footing in academic institutions and hospital-based residency programs.

DF: Other than education, what other areas of interest would you like to share with the readers?
DH: Of course, the AAID should and will be the future organization for dental students and young dentists. At the present time we will continue to work with dental schools to provide the Bite of Education programs and offer free electronic AAID membership their first year out of school.

An emphasis will be placed on starting and maintaining AAID sponsored study clubs. Study clubs have a history of producing better implant dentists at every skill level.

The A&C Board is investigating online testing methods to evaluate our candidates who wish to challenge the oral exam. Dr. Michael Fioritto and his committee together with staff assistance from Jon Sprague are hopeful this will become a reality in 2021.

We would like to work with general members to first become Associate Fellows and then become Fellows. Only 20 percent of AAID members are presently credentialed members. I want to encourage and help you get to the next steps through credentialing and then move to challenge advance credentialing by attaining diplomate status in the ABOI.

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DF: Other than Dr. Pankey, did you have other mentors in your life?
DH: Zig Ziglar was my mentor for 28 years. He not only helped my dental practice, but also helped me as a husband, father, and leader. Zig was a nationally known speaker and a wonderful friend. Zig encouraged me to write a book, which I did in 2005. The book teaches people to easily share their Christian faith with others who are interested.

DF: Seems like your Christian faith is important to you. Please tell us about that.
DH: It is important. What could be more important to any of us than where we spend eternity? I have been on about 30 dental missionary trips around the world where I share my faith. My wife Wanda went with me on most of them. I did dental mission trips one to two times per year. I have had the privilege of speaking at Christian men's groups, weekend retreats, as well as teaching in churches.

After Wanda's death, I was speaking in a little church north of Columbus, Ohio and after I spoke, the Pastor told me how sorry he felt about Wanda's home going.

He asked me if I knew why God had called Wanda home and I was still here? Of course I told him I had no idea. He said, "Would you like to know why your wife went to heaven before you?" I was shocked he said that.

When I asked what he was talking about, he asked me to look at a Bible verse, Philippians 1:23-24 in which the Apostle Paul says:

23 "But I am hard-pressed from both directions, having the desire to depart and be with Christ, for that is very much better;

24 "yet to remain on in the flesh is more necessary for your sake."

The pastor asked me, "Do you know who the 'your sake' is? I said, "No."

He said that the "Your sake" is other people. "God left you here to invest the rest of your life in other people…now go do it."

I want to invest a large part of my remaining life in the members of the AAID.

DH: Over the next year I will be sending out AAID emails entitled "Coffee with Duke," that will discuss wisdom and knowledge about living a purposeful life as a dentist, spouse, parent, and leader.

These emails are an invitation for AAID members to create conversation with each other. Go to *aaid.com/DrHeller* to read these messages. Please feel free to reach out and ask questions. You can email me at *president@aaid.com*.

I hope each of you will take advantage of this offer to communicate with Duke, your AAID President.

Zig Ziglar was my mentor for 28 years. He not only helped my dental practice, but also helped me as a husband, father, and leader. Zig was a nationally known speaker and a wonderful friend. Zig encouraged me to write a book which I did in 2005.

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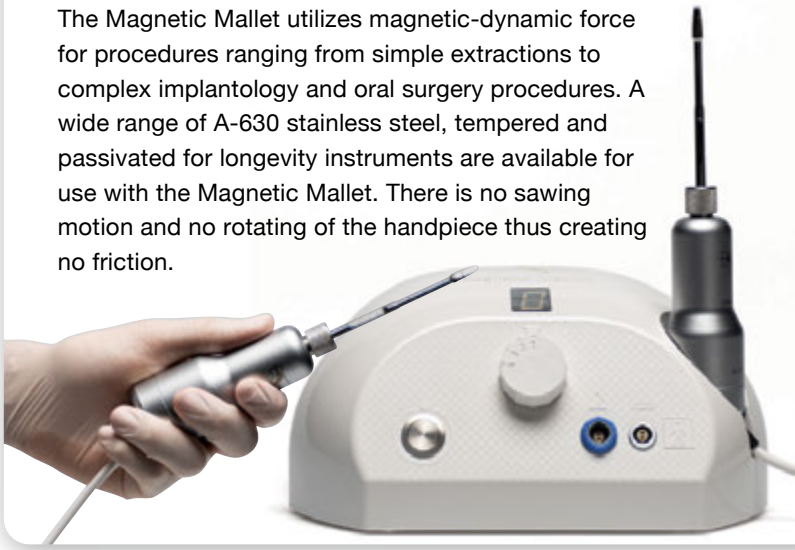

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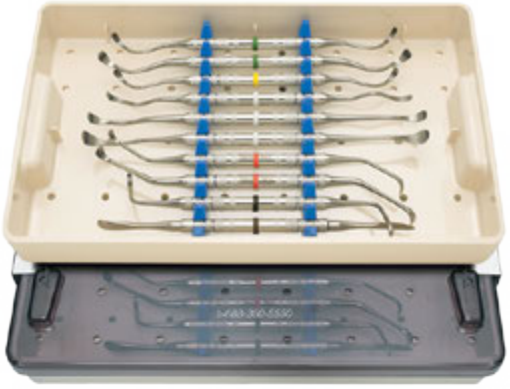

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By Frank R. Recker, DDS, JD
Chief Counsel, First Amendment, Specialty Matters

The Specialty Arena: Who's Calling the Shots?

Whenever I give a lecture to various dental groups, I try to explain the historical evolution of dental specialties, when they began and how they evolved since the early 1950s. There was no political warfare, lobbying by special interest groups, trade associations, or hundreds of thousands of dollars expended on campaigns for or against a new specialty—it just happened quietly and without much fanfare.

Then, in the mid 1970s, the laws on advertising began to change when the U.S. Supreme Court ruled that commercial advertising, specifically pharmacy advertising, was a form of speech to be protected by the First Amendment to the Constitution, commercial free speech. Although this form of protected speech was given less First Amendment protection than non-commercial speech, it nonetheless warranted protection. Since this decision in the mid 1970s to the present, laws protecting commercial free speech have gained broader legal support and more state scrutiny. And that's as it should be because commerce is an essential component of our entire economy and our status as an international trade powerhouse is based largely on our ability to market our products and services. To accomplish these objectives, buyers/consumers of our products and services need to know about what we're selling and why one company believes its products are better than, for example, four other competing companies.

It's easy to see how important the First Amendment became to every aspect of our dental commercial lives; what was much harder to foresee was how all of this would impact the profession of dentistry. As advertising began to permeate our profession and became much more commonplace, competition became a key factor in everyday dentistry, and that was manifested in newspaper ads and video blurbs on television that claimed, "Our dental services are better than…" or "Bring in this coupon". Our profession quickly learned that marketing really works, no matter how good the dental provider.

It's easy to see how important the First Amendment became to every aspect of our dental commercial lives; what was much harder to foresee was how all of this would impact our profession of dentistry.

As it stands today, some states allow many types of dental advertising: the 5th Circuit (Texas, Mississippi, and Louisiana) has declared that oral medicine, oral facial pain, and implant dentistry groups can call themselves specialists if they meet certain criteria.

In any event, in the '70s, '80s, and '90s a new specialty became a big deal because it represented another competitor in the dental marketplace that could negatively affect the pocketbooks of an existing specialty or even general dentistry. So naturally, existing specialty and general dentistry groups lobbied to persuade decision makers that a new specialty was not needed—and why. These periodic battles were inherently biased, political, unprofessional, and unseemly. The American Dental Association (ADA) became the political hot bed of contention and lobbying almost a full-time job. None of this had any bearing on public health, but primarily dental wealth.

As the legal challenges continued (I've been involved in every case since 1993), various special interest groups allocated huge sums of money for their primary mission of opposing or supporting a new specialty. Courts have added their opinions, for the most part supporting the First Amendment rights attached to commercial free speech on both the state and federal levels. As it stands today, some states allow many types of dental advertising: the 5th Circuit (Texas, Mississippi, and Louisiana) has declared that oral medicine, oral facial pain, and implant dentistry groups can call themselves specialists if they meet certain criteria.

So what really happened and how did we allow this phenomena to occur? We allowed these determinations to be controlled by political bodies such as the ADA, special interest groups in periodontics, oral and maxillofacial surgery, orthodontics, endodontics, and more. We did not have a crystal ball more than 60 years ago. But if we did, the answer would have been clearer: Keep the politics and self-interest out of the equation. As I see it, in the world of dentistry there is only one group with virtually no axe to grind relative to dental specialties: the American Association of Dental Boards. Even if one or two board members are lobbied by a special interest group, the majority of board members are not sympathetic to such political machinations. More importantly, the 2015 decision in *FTC v NC Board* puts every Board member in potential personal jeopardy if they act in an anticompetitive manner in violation of the tenets of the antitrust laws.

This day and time could be the year of reason and rationale thinking without political zealotry. We have the opportunity—now let's see what we do with it.

By Roger P. Levin, DDS

The Successful Practice in the COVID-19 Recovery

To say that dentistry and the world have been through a lot in 2020 would be a severe understatement. First, there was a country-wide shut down. Second, 80 percent of all dental practices had to receive some type of federal funding to survive. Third, practices reopened to levels of patient pent-up demand never experienced by practices before. And fourth, well…time will tell.

Even in the face of all these first-time events and the uncertainty surrounding them, dental practices can take steps to improve performance. Whether the goal is to increase practice production, gain new patients, improve implant case acceptance, or introduce new services, there are positive actions that will allow practices to recover faster, better, and deeper.

The four steps every practice should take right now

1. **Reactivate patients.** During the pandemic, we are dealing with health and safety concerns that will cause a certain level of patient attrition to automatically happen. To help address this, every practice should take steps to focus on patient reactivation every single day. We suggest starting with a system that requires you to make a series of three phone calls with excellent scripting that educates every patient about safety procedure and financial options. For example, we recommend communicating the following:

"Our practice has always followed all Centers of Disease Control and Prevention and American Dental Association guidelines and patients are very safe in our office. Due to those guidelines, dental practices are among the safest locations in the country."

Whatever you choose to say, it should be positive and provide reassurance regarding any safety concerns. One practice we know adds the following line to the script: "Patients are safer in our office than they would be in a grocery store." This cannot be properly conveyed within a text message, which is why we recommend starting with telephone calls to reactivate any patient that does not have an appointment with an objective of engaging the patient in conversation.

Following three attempts to reach the patient and leaving scripted messages, our system calls for practices to send three text messages, and then three emails. Although reaching out nine times might sound like overkill, the average response time from a patient prior to COVID-19 was about four weeks—it will probably take longer now.

Keep in mind that the word *reactivate* now refers to any patient without an appointment; whereas, in the past it referred to patients who had not been into the practice within the last 18 months. Keeping the patient base at the highest potential level is a critical factor in the

continued on page 18

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Even though you may have had patient financing for years and even offered it to many patients, this doesn't mean that they are fully aware of its availability or how it works. They need to be told about it—repeatedly.

short- and long-term success of the practice. You should regularly measure the number of active patients who aren't scheduled and use those metrics to identify positive trends by using the system described above.

2. **Tell patients about interest-free financing.** Even though you may have had patient financing for years and even offered it to many patients, this doesn't mean that they are fully aware of its availability or how it works. They need to be told about it—repeatedly. We are recommending that every patient phone call include this comment:

   "By the way, Mrs. Smith, interest-free financing is available for any patients who would like to take advantage of it."

   Including this information when communicating with patients provides them with an option if they are worried about whether or not they can afford treatment during these challenging times.

   Remember, the small percentage of the fee that is paid to the financing company is worth it because it is minor compared to the loss of a patient or the treatment you have recommended. The longer patient goes without an appointment, the less likely he or she is to ever come back to that practice. Your patients' awareness of patient financing will help keep your patient base strong and increase case acceptance.

3. **Change your approach to case presentation.** With patient financing also comes a shift in which information to include in a case presentation. In a crisis it is essential to think differently and be open to change. One strategy that I believe will help during this time is to present financial options at the beginning of the case presentation. I understand that this goes against everything we've been taught for many years about building value and then presenting fees; however, in an era during which patients are concerned both about their safety and finances, it's important for them to feel they can afford treatment right from the start. If they don't, they will politely listen to the case presentation, but they will have already made up their mind that they can't afford it. At the end of the presentation, they will tell you that they will get back to you, don't know their schedule, or must think about it. The best way to help patients understand they can afford treatment is to review financial options right from the start. You don't necessarily divulge the full and final case fee at that time, but you should share the availability of options such as discounts, payment plans, and interest-free financing. After hearing this, they'll become much more open to listening to the rest of the case presentation and accepting treatment.

4. **Launch an ongoing patient education program.** This can be as simple as sending monthly emails to update patients on the practice, services, implant advances, and general health information. This type of communications program will help keep patients engaged with the practice, remind them to keep appointments, encourage them refer others, educate them about services that may benefit them, and create a sense of loyalty to the practice.

   Keep in mind, most communication should be short. Email is the least expensive and most effective way to reach patients. Although there are many ways to build a communication program, whichever you choose will be received in a very positive light when patients hear from their dentist.

In any business turnaround or recovery, production becomes the single most important factor. If production is kept at the right level, the practice will recover much more quickly. During this time, practices must think differently, implement new strategies, and measure regularly. The recommendations in this article are among the most powerful for keeping a practice strong and healthy in a crisis. Quickly implementing the above recommendations will help to address the current and future concerns relative to a successful COVID-19 recovery.

Roger P. Levin, DDS is the CEO and Founder of Levin Group, a leading practice management consulting firm that has worked with over 30,000 practices to increase production. A recognized expert on dental practice management and marketing, he has written 67 books and more than 4,000 articles and regularly presents seminars in the U.S. and around the world. To contact Dr. Levin, or to join the 40,000 dental professionals who receive his Practice Production Tip of the Day, visit www.levingroup.com *or email* rlevin@levingroup.com.

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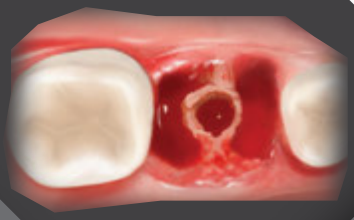
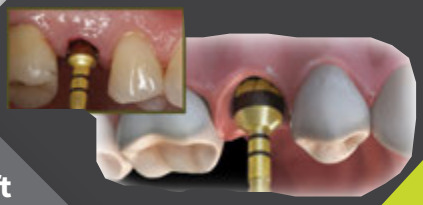
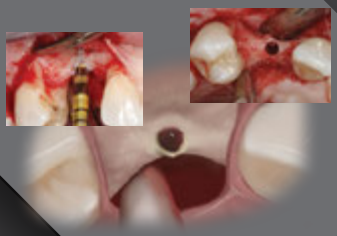
Molar Septum Expansion



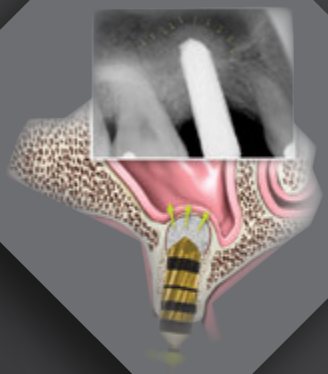
Immediate Implant Placement



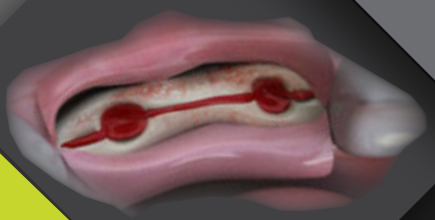
Guided Expansion Graft



Sinus Lift



Ridge Expansion



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HOW WOULD YOU TREAT THIS PATIENT?

Peri-implantitis can affect any implant (1-6). There are treatments available but as yet there is no generally accepted treatment protocol (1-6). Local treatments for peri-implant mucositis may be successful (1-6). Surgical treatments for peri-implantitis may be successful when there is significant bone loss (1-6). When bone loss reaches 6mm, explant may be the most appropriate treatment (1). The 6mm criterion may be the cut-off point before excessive bone loss compromises any regenerative procedure (1).

Peri-implantitis treatment may assume the problem lies on the implant surface and there is evidence that points in that direction (1). Rough surface implants may be more prone to peri-implantitis than machined surface implants (1). Nonetheless, there is some evidence that the infectious process may be lodged in an osseous site, and when an implant is placed in that site, it develops peri-implantitis (7). It may be that a previously infected tooth was not debrided thoroughly so that there are remnant bacteria left to colonize an implant.

Thus, should a regenerative procedure for peri-implant bone loss include a wide debridement of osseous tissue that may contain infectious bacteria (8)? The regenerative procedure may then be invaded by remnant bacteria from the adjacent bone that will in turn infect a new implant placed in that site.

Saline only implant cleansing was found to be appropriate by Kim and coworkers. They found bone regenerated (8). Thus, removal of diseased bone may be an important step in regeneration treatment of peri-implantitis (8).

Please email your thoughts about this case to *editor@aaid.com*.
We will be sharing responses.

Peri-implantitis: Is it on the implant surface or in the bone surrounding the implant?

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ABOI/ID 2021

Virtual Comprehensive Board Review Course

Course Speakers

Dr. Joseph Leonetti Dr. Jack Piermatti Dr. Shankar Iyer Dr. Suheil Boutros Dr. Bart Silverman

DAY ONE

Thursday, May 20, 2021
9:00am - 5:00pm

Medical Assessment
Speaker: Dr. Joseph Leonetti
- Review of systems/pathology
- Cardiac, Renal, Pulmonary, Endocrine, Neurological
- Pharmacologic Protocol in Oral Implantology

Dental Assessment
Speaker: Dr. Shankar Iyer
- Initial Evaluation
- Diagnostic Workup (radiographs, casts, photos)
- Dental Exam (hard and soft tissue, bone classification)
- Smile evaluation
- Occlusal evaluation
- Treatment plan (grafting, # of implants, template, interim prosthesis)
- Restorative plan
- Ideal Implant Positioning
- Immediate placement
- Immediate implant placement
- Immediate temporization

Mock Board
Speakers: Dr. Leonetti and Dr. Silverman

DAY TWO

Friday, May 21, 2021
9:00am – 5:00pm

Surgical Module I
Speaker: Dr. Bart Silverman
- Socket / membrane grafting
- Basic surgical principles in implant dentistry
- Standard Protocol for Implant placement into abundant bone
- Socket/membrane grafting
- Use of bone growth factors such as PRF

Surgical Module II
Speaker: Dr. Joseph Leonetti
- Radiographic Evaluation of The Paranasal Sinuses
- Lateral Wall Graft Procedures
- Osteotome (crestal) grafting approach.
- Block Graft

Surgical Module III
Dr. Bart Silverman
- Full arch implant surgery Technique

Mock Board
Speakers: Dr. Leonetti and Dr. Silverman

DAY THREE

Saturday, May 22, 2021
9:00am - 5:00pm

Prosthodontic Module
Dr. Jack Piermatti
- Prosthodontic Principles in Oral Rehabilitation of Natural Teeth and Implants
- Treatment planning for fixed dental implant restorations
- Laboratory procedures, implant components, and biomaterials
- Treatment Planning Considerations in Full-Arch Fixed Implant Restoration
- Implant-Assisted Removable Prostheses
- Prosthodontic Complications

Mock Board
Speakers: Dr. Piermatti and Dr. Leonetti

DAY FOUR

Sunday, May 23, 2021
9:00am - 12:30pm

Soft Tissue Module
Speaker: Dr. Suheil Boutros
- Treatment of Peri-Implant Disease
- Etiology, management, and prevention of peri-implant disease.
- Etiology, management, and prevention of failed dental implants.
- Soft Tissue Augmentation

Mock Board
Speakers: Dr. Leonetti and Dr. Boutros

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JOISAMPLER

Editor's Note: Because of busy schedules, you may not have time to read the dozen or so articles in each issue of the *Journal of Oral Implantology*. In this section of *AAID News*, we selected a few articles that have broad applicability to the daily practice and provide a brief summary of key points so you can decide if you wish to read the complete article. The following articles are from Volume 46, Issue 5 (2020).

JOI JOURNAL OF ORAL IMPLANTOLOGY www.joionline.org

RESEARCH ARTICLE

Effect of Drilling Speed on Dental Implant Insertion Torque

The specific aim of this study was to examine whether slow drilling speeds (15 rpm) produce pilot holes that result in different implant insertion torques than pilot holes made with higher speed drilling (1500 rpm). To accomplish this, the authors present a new method for transferring samples from a drilling machine onto an implant insertion torque measuring apparatus while maintaining the same center of rotation. Simulated bone blocks of polyurethane were used with 2 densities of foam to mimic trabecular and cortical bone. Pilot holes drilled using both drilling methods were morphologically characterized at macro and micro scales. Nobel Biocare Nobel Active implants were then placed. Profilometer and optical imaging were used to determine changes in the pilot hole morphology. Recorded insertion torque measurements were used to quantitatively contrast implants inserted into holes drilled using the 2 speeds. Although there were slight qualitative and quantitative differences between the low- and high-speed drilled pilot holes, the differences were insufficient to cause a statistically significant change in insertion torque.

Kaveh Varghai, Steven J. Eppell, PhD, Russell Wang, DDS, MSD, *Journal of Oral Implantology*. 2020 December; 46(5):467-474.

FIGURE 2. Images of the 2 implant types used in this study: Nobel Biocare regular platform (RP) and narrow platform (NP). The RP implant has a retrograde slope near the top of the implant while the NP implant does not. In addition, the thread patterns are clearly complex, which adds structure to the torque vs displacement data not typical of a more simply threaded screw.

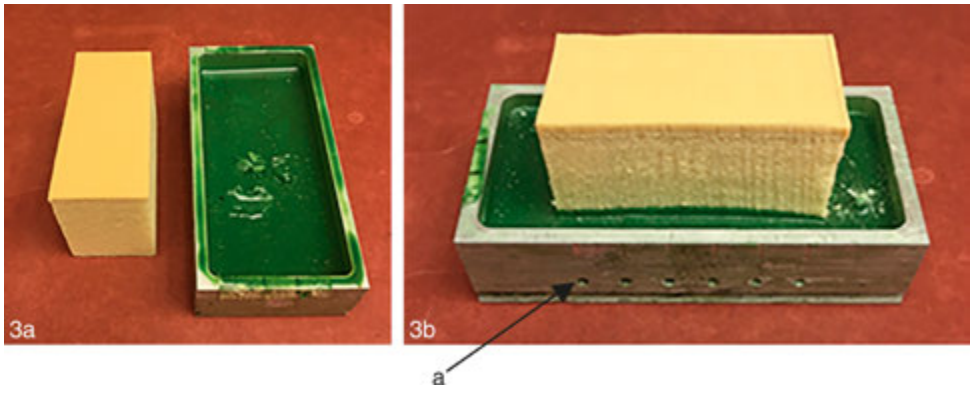

FIGURE 3. Boat for mounting samples. (a) Rigid polyurethane bone substitute (left) and an aluminum boat containing green wax used to fix the bone substitute inside the boat. (b) Rigid polyurethane bone substitute embedded in the aluminum boat using green wax, which hardens when cooled. Letter ''a'' marks the evenly spaced indents used to adjust the aluminum boat about the machine platform.

RESEARCH ARTICLE

Three-Dimensional Finite Element Analysis of Osseointegrated Implants Placed in Bone of Different Densities With Cemented Fixed Prosthetic Restoration

A key factor for a successful dental implant is the manner in which stresses are transferred to the surrounding bone. Strength of bone is directly related to its density. Maximum stresses are reported to be incurred by the crestal cortical bone surrounding the implant. Displacement of implants is significantly higher in soft cancellous bone than dense bone. Implants are often placed in bone of different densities to support fixed dental prostheses. This study was aimed at assessing stress and deformation generated by osseointegrated implants placed in bone of different densities on a cemented fixed prosthesis when subjected to static and dynamic loading.

A 3-dimensional finite element analysis was done on a computer-aided design model simulating maxillary bone segment with 2 different bone densities (D2 and D4). The effect of loading was evaluated at the implant–bone interface, implant–abutment interface, abutment, implant abutment connecting screw, cementing medium, and fixed prosthesis. Stresses were calculated using von Mises criteria calibrated in megapascals and deformation in millimeters. These were represented in color-coded maps from blue to red (showing minimum to maximum stress/deformation), depicted as contour lines with different colors connecting stress/deformation points. The study found greater von Mises stress in D2 than D4 bone, and in D2 bone the component with higher stress was the implant. Deformation was greater in D4 than D2 bone, and in D4 bone the abutment-prosthesis interface showed more deformation.

Kasthuri Chidambaravalli, BDS, Vinod Krishnan, MD, *Journal of Oral Implantology*. 2020 December; 46(5): 480-90.

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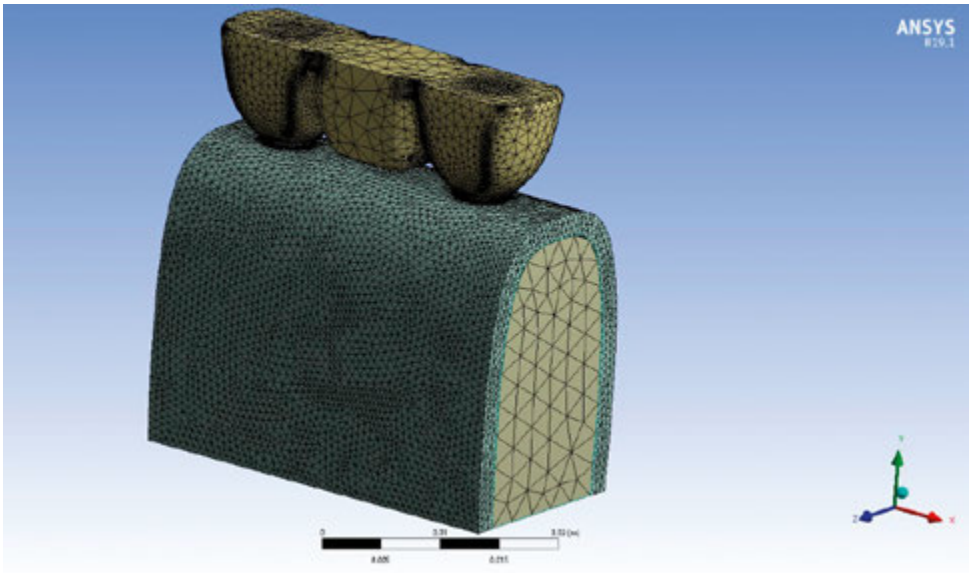

FIGURE 2. Meshed model.

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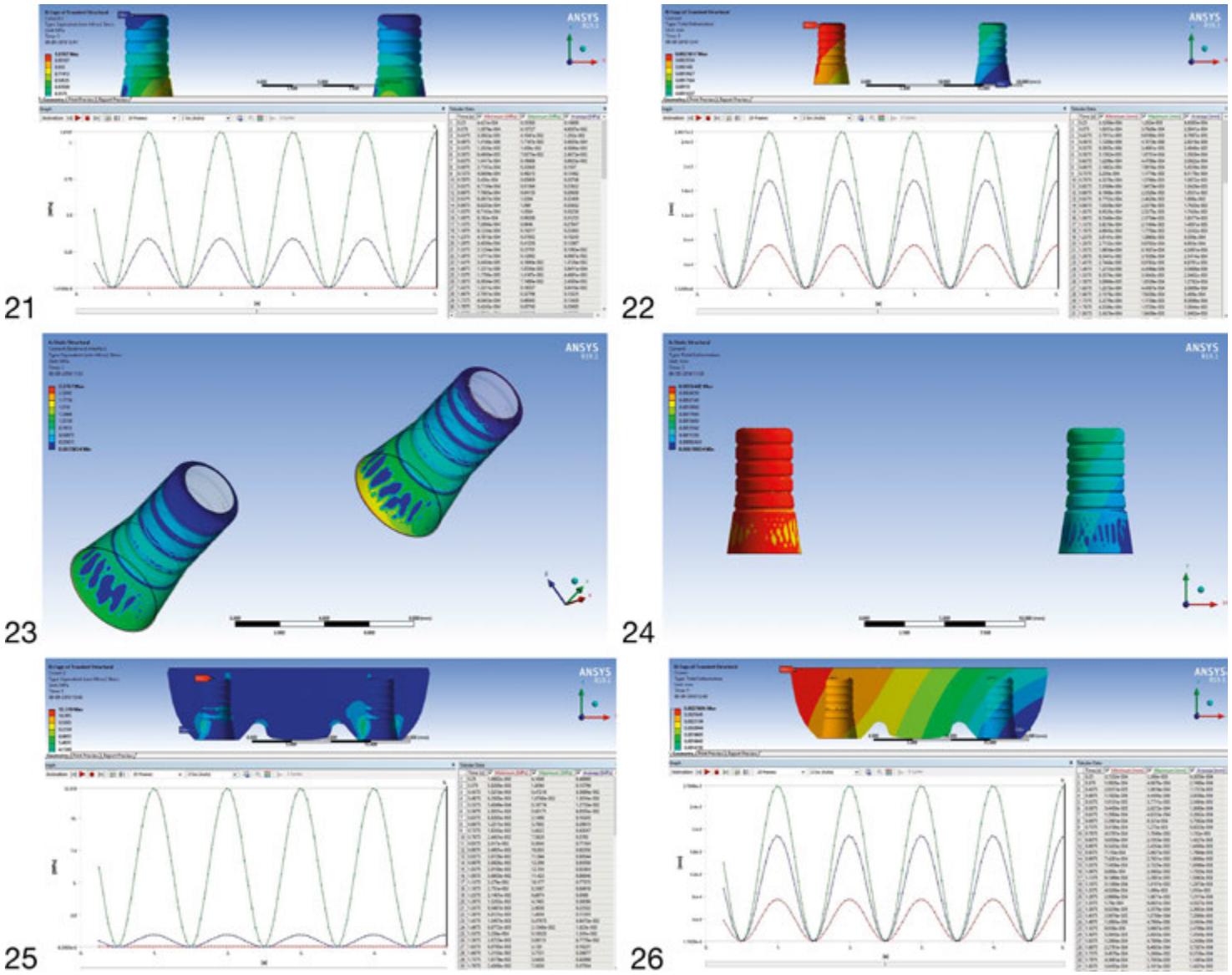


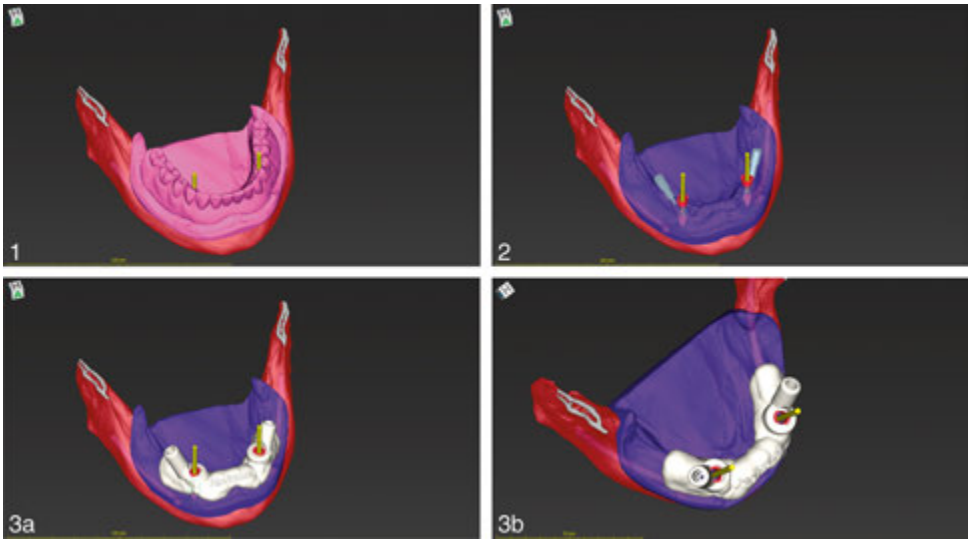
FIGURES 21–26. FIGURES 21 AND 22. von Mises equivalent stress and deformation in cementing medium under dynamic loading. FIGURES 23 AND 24. von Mises equivalent stress and deformation (in millimeters) in cementing medium under static loading. FIGURES 25 AND 26. Von Mises equivalent stress and deformation in abutment–prosthesis interface under dynamic loading.

CASE REPORT

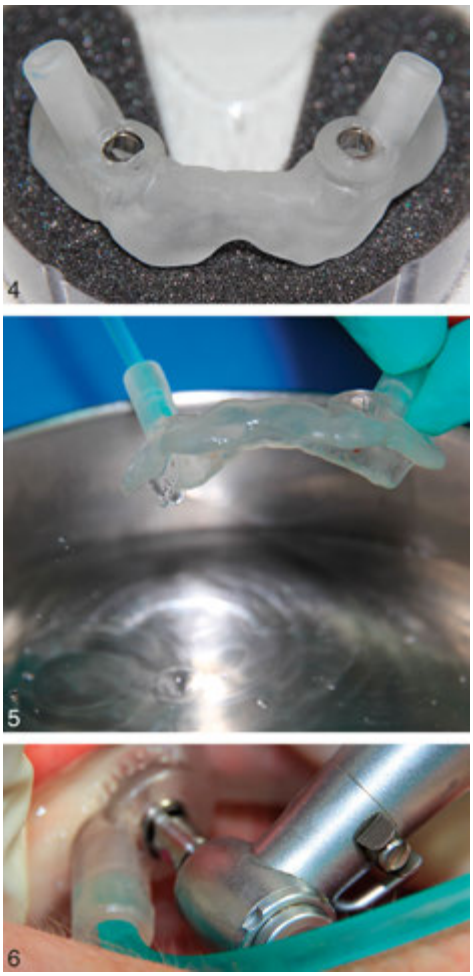
Guided Implant Placement Using an Internally Cooling Surgical Template: A Technical Note

Cooling irrigation during implant bed preparation is mandatory to avoid overheating. Due to the surgical guide design, external cooling systems do not reach the point of entry of the implant burr. In this case report, the authors describe a new technique for irrigation during guided implant surgery for direct rinse of the burr. Using computer-aided design/computer-aided manufacturing additive technology, a pin of a cooling pipe was designed and implemented in a surgical guide template. The implant bed preparation was performed while the cooling pipe was connected to the surgical guide. During surgery, the irrigation solution was directly rinsing the burr at the point of entry through the irrigation channel. The use of a cooling surgical guide seems to improve the cooling of the bone during implant bed preparation. This might lead to less thermal effect of bone cells. However, systematic studies are needed to confirm the observations of the presented case report.

Vasilios Alevizakos, DDS, Gergo Mitov, DDS, Constantin von See, DDS, *Journal of Oral Implantology*. 2020 December; 46(5): 533-6.



FIGURES 1–3. FIGURE 1. Prosthetic-driven implant positioning in the region of the missing first premolars. FIGURE 2. Setting the guide sleeves (red) and adding generic sleeves (light blue) representing in shape the end of the cooling tube for designing an internally cooled surgical guide. FIGURE 3. The 3-dimensional design of the internally cooled surgical guide.



FIGURES 4–6. FIGURE 4. The designed guide was 3-dimensionally printed and the guided sleeves added. FIGURE 5. The cooling tube was connected safely with the surgical guide. Irrigation solution flowed through the constructed internal channels. FIGURE 6. Implant bed preparation using an internally cooled drill guided by internal irrigation channels.

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JOI Sampler

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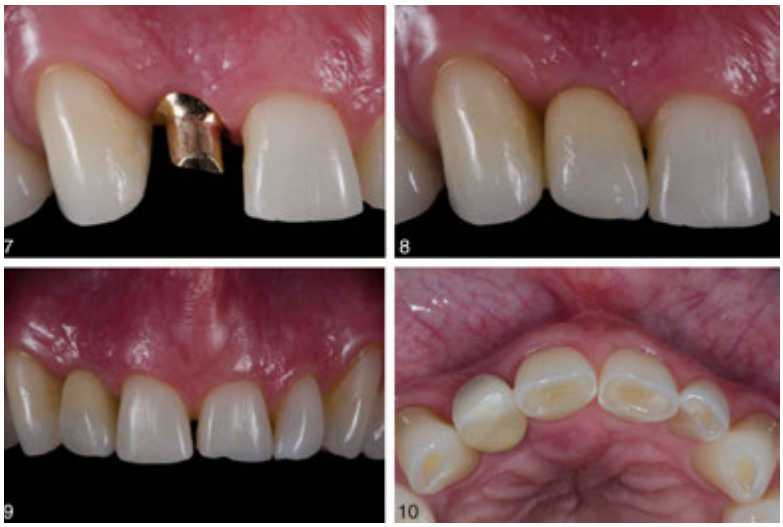
CLINICAL ARTICLE

Facial Gingival Changes With and Without Socket Gap Grafting Following Single Maxillary Anterior Immediate Tooth Replacement: One-Year Results

Pakpoom Yuenyongorarn, DDS, MS, MsD, Joseph Y. K. Kan, DDS, MS, Kitichai Rungcharassaeng, DDS, MS, Hiroyuki Matsuda, DDS, Phillip Roe, DDS, MS, Jaime L. Lozada, DMD, Joseph Caruso, DDS, MS, MPH, *Journal of Oral Implantology*. 2020 December; 46(5): 496-505.

The authors of this 1-year prospective study evaluated horizontal and vertical facial gingival tissue changes after immediate implant placement and provisionalization (IIPP) with and without bone graft in the implant-socket gap (ISG). During IIPP, 10 patients received bone graft material in the ISG (G group), while the other 10 patients did not (NG group). The implants were evaluated for implant stability quotient (ISQ), modified plaque index (mPI), modified bleeding index (mBI), marginal bone level (MBL), facial gingival level (FGL), and facial gingival profile (FGP) changes. The mean ISQ value at 9-month follow-up was statistically significantly greater than on the day of implant surgery ($P > .05$). The mPI and mBI scores demonstrated that patients were able to maintain a good level of hygiene. There were no statistically significant differences in the mean MBL changes between the G and NG groups ($P > .05$). There were statistically significant differences in FGL changes between the G (-0.77 mm) and NG (-1.35 mm) groups ($P = .035$). There were no statistically significant differences in FGP changes between the G and NG groups ($P > .05$). However, statistically significant differences were noted in FGP change between the 3–12 and 0–12 month intervals in both groups ($P > .05$). Within the limitations of this study, although no significant differences were noted in FGP changes between groups, G group experienced significantly less FGL changes than NG group. The authors determined that bone graft material placement into ISG seems to be advantageous for tissue preservation during IIPP; however, they also concluded that future long-term studies, with larger sample size, are needed to validate the efficacy of such procedure.



FIGURES 7–10. FIGURE 7. Labial view 9 months after the implant surgery; customized abutment was torqued to 25 Ncm. FIGURE 8. Labial view 9 months after the definitive restoration delivery. FIGURE 9. Labial view of the definitive restoration after 1 year of implant surgery. FIGURE 10. Occlusal view of the definitive restoration after 1 year of implant surgery.

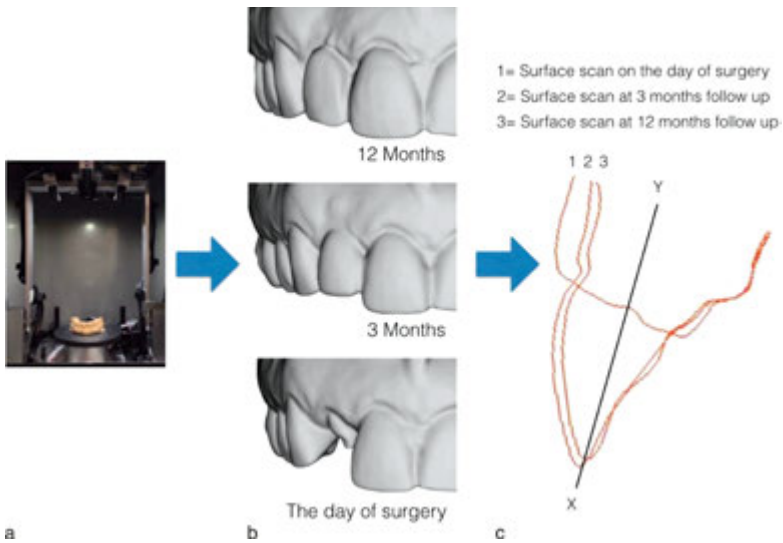


FIGURE 11. Workflow of surface scan measurement. (a) Master cast was scanned. (b) Surface scan on the day of surgery, at 3 months, and at 12 months follow-up. (c) Surface scans were superimposed. The crown long axis (XY), bisecting the crown, was used as reference line for facial gingival level and profile change measurement.

IN MEMORIAM

Ronald W. Evasic, DDS, FAAID, DABOI/ID

Ronald W. Evasic, DDS, FAAID, DABOI/ID passed away at the age of 83 on January 1, 2021. He was born on February 17, 1937 in Detroit, Michigan. Dr. Evasic graduated from the University of Michigan Dental School in 1961.

Dr. Evasic became an Associate Fellow in 1978, Fellow in 1985, and Honored Fellow in 1987. He was Chair of the Admission and Credentials Board from 1991-1993 and 1996-1997 member of the Bylaws Committee from 1992-1993, and Chair of the Annual Conference Education Committee from 1997-1998. He was AAID President in 1988.

Ira J. Larsen, DDS

Ira J. Larsen, DDS, passed away on January 2, 2021. He was born in Brigham City, Utah on August 23, 1922. He attended Weber College, Utah State, and University of Utah. He served with Patton's 3rd Army in the artillery as Company Clerk in Europe during WWII. He graduated from the University of Pacific School of Dentistry in 1951.

Dr. Larsen became a Fellow in 1967 and later a life member. He served the Arizona Children's Home and Arizona State Board of Dentistry.

Ashok Patel, DMD, FAAID, DABOI/ID

Ashok Patel, DMD, FAAID, DABOI/ID passed away December 28, 2020. Dr. Patel opened the Dr. Kiran C. Patel Multi-Specialty Hospital in Dang, an impoverished region in Gujarat, India, to better the lives of the residents with free medical and dental care to 53,000 school children with limited access.

He became an Associate Fellow in 1996, a Fellow in 2001, an ABOI/ID Diplomate in 2002. Dr. Patel is also an Honored Fellow. He served on the Membership Committee from 2009 to 2011 as well as the AAID Board of Trustees from 2013 to 2015. He was an active Northeast District Officer, serving as President from 2005 to 2006.

Dr. Patel graduated Tufts University Dental School in 1998. He founded the Boston Institute of Dental Implantology and Bone Augmentation in 1997 to offer training programs to foreign dentists.

O. Hilt Tatum, III, DMD, AFAAID

O. Hilt Tatum, III, DMD, AFAAID passed away from his long-time battle with cancer. He was born on May 1, 1958. Dr. Tatum graduated from the University of Florida in 1984.

Dr. Tatum was a long-time member of the American Academy of Implant Dentistry. He became an Associate Fellow in 1992 and an Honored Fellow in 2008. He was a member of the Education Oversight Committee from 1996 to 1997.

Dr. Tatum is survived by his wife Scarlet and father, Dr. O. Hilt Tatum.

academynews

AAID Candidates Pass the Associate Fellow Written Exam, Part 1

The AAID encourages members to advance their implant education by becoming credentialed. The Associate Fellow written exam is the first step in this process. The Part 1 Examination is designed to assess knowledge of basic science, "entry-level" knowledge and understanding of implant dentistry principles, and the ability to apply these principles in a clinical situation.

Candidates who pass Part 1 have four years to take the Part 2 (oral) examination. This year, 80 candidates from different states and 7 different countries passed Part 1 of the Associate Fellow Exam. The AAID can help you with Part 2 by providing you with a credential coach. Visit *www.aaid.com/coach* for more information.

Congratulations to the following 80 candidates:

Dr. Yahia Aboul-Azm
Dr. Rosemary Ahanor
Dr. Hussain Albannai
Dr. Andrew Allouch
Devin Anderson
Dr. Smita Ashok
Dr. Mohammed Ashoor
Dr. Gayane Avakyan
Dr. David Axelrod
Dr. Dominik Berdysz
Dr. Gunnar Boelman
Dr. Stephen Boyles
Dr. Theodore Chang
Dr. Swapnil Chincholikar
Dr. Han Choi
Dr. Dino Dee
Dr. Madhavi Durvasula
Dr. Mohamed El Gamal
Dr. Rana Faraneh
Dr. Chad Froebel
Dr. Trent Gillard
Dr. Tracey Glinko
Dr. Charu Goel
Dr. Romulo Joseph Guideng, Jr.
Dr. Basem Haddad
Dr. Razan Hamzeh
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Dr. Daizo Ishiguro
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Dr. Humberto Nunez Gil
Dr. Brian Olvera
Dr. Yuki Osawa
Dr. Jayesh Patel
Dr. Tarik Patel
Dr. Cong Peng
Dr. Steven Puffer
Dr. Jordyn Reiakvam
Dr. Justin Riel
Dr. Petrica Rouse
Dr. Shorouq Sahawneh
Dr. Luiz Dos Santos
Dr. Sameer Shajahan
Dr. Jatinder Sharma
Dr. Alexandra Shepherd
Dr. Yutaka Shimizu
Dr. Takamitsu Shiroyama
Dr. Vinni Singh
Dr. Yara Soto Solis
Dr. Garrett Swanson
Dr. Hidetoshi Takeshita
Dr. Marika Tamano
Dr. Nozar Tarkesh
Dr. Fernando Tordoya
Dr. Noriyuki Ueno
Dr. Leanna Ursales
Dr. Shashank Vijapure
Dr. Steven Vorholt
Dr. Eric Wang
Dr. Chase Whitlow
Dr. Adam Woods
Dr. Hilda Yacoub-Fokas
Dr. Hiroki Yamada
Dr. Layth Yaseen
Dr. Ahmed Zaki

Congratulations to the 2020 AAID Fellows

Dan Abell, DMD
Paducah, KY

Sam Akhrass, DDS
Lenoir City, TN

Mohamad Albik, DDS
Elk Grove, CA

Jeff Allred, DDS
San Marcos, CA

Tarek Assi, DMD
Parkland, FL

Frank Caputo, DDS
Racine, WI

Joey Chen, DDS
Taipei, Taiwan

Josée Desrochers, DMD
St-Jean-sur-Richelieu, Québec, Can

Ravi Doctor, DDS
Arlington, TX

Nathan Doyel, DMD
Sherwood, OR

David Epstein, DDS
San Francisco, CA

Katherine Ferguson, DMD
Weston, FL

Allen Ghorashi, DDS
Upper Saddle River, NJ

Michael Gillis, DDS
Halifax, Nova Scotia, Can

Mohamed Hindy, DDS, MS
Darien, IL

Salah Huwais, DDS
Jackson, MI

Winnie Lee, DDS
Summerland Key, FL

Andrew MacConnell, DDS
Bluff City, TN

Vinh Nguyen, DDS, MSC
Brossard, Qubec, Can

Pierre Obeid, DDS
Leamington, Ontario, Can

Peter Ricciardi, DDS
Reno, NV

Edward Ruvins, DDS
Englewood, CO

Rami Salloum, DDS
Bethlehem, PA

Maungmaung Thaw, DDS
Milpitas, CA

Tye Thompson, DDS
Midland, TX

Janice Wang, DDS
Moraga, CA

Christopher Ward, DDS
Claremore, OK

Joseph Wilbanks, DDS
Toccoa, GA

Congratulations to the 2020 AAID Associate Fellows

Rishabh Acharya, BDS, MDS
San Francisco, CA

Ashish Agrawal, BDS, MDS
Varanasi, Uttar Pradesh, India

Abdulaziz Al-Helal, BDS, MS
Loma Linda, CA

Saad Al-Resayes, BDS, MS
Loma Linda, CA

Hussain Alsayed, BDS, MSD
Redlands, CA

Minho Choi, DDS, MSD, PhD
Daejeon, South Korea

Changkui Her, PhD
Asan-Si, Chungcheongnam-Do, South Korea

Arjumand Kabli, BDS
Dubai, United Arab Emirates

Pongrapee Kamolroongwarakul, DDS, MS
Monterey Park, CA

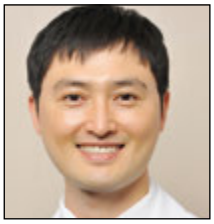
Christopher Keldsen, DMD
Bend, OR

Junghwa Kim, DDS, MS
Gwangju, South Korea

Byungjin Lee, DDS
Seojong-si, South Korea

Ryan Lehr, DDS
Monterey, CA

Pranai Nakaparksin, DDS
Bangkok, Thailand



Soonsik Park, DDS, MS
Gwangju, South Korea

Sage Pollack,DMD
Denver, CO

Oraphan Rungrojwittayakul, DDS
Bangkok, Thailand

Kenzo Shiozaki, DDS
Saitama, Japan

Papatpong Sirikururat, DDS, MSC
Bangkok, Thailand

Sebastian Thomas, BDS, MDS
Kottayam, Kerala, India

Yi Xing, DMD, MSC
New Westminster, BC, Can

Hadil Yousef, DDS
Wadsworth, OH

AAIDF
AMERICAN ACADEMY OF IMPLANT DENTISTRY FOUNDATION

2020 Student Research Grant Applications

As part of its mission, the AAID Foundation supports the work of researchers who discover new and innovative ways to forward the field of Implant Dentistry. Through funding, researchers aim to discover and translate their findings into implant dentistry practice.

Here at the 2020 Student Research Grant Awardees

Microbial and surface analysis of extracted implants

Aalieyah Billings
Meharry Medical College
School of Dentistry
Department of Periodontics

The major objectives of our study are to evaluate and map out the mechanisms of implant failure. We want to evaluate the surface changes on the implant due to exposure in the oral cavity due to attachment loss and due to bacterial invasion in order to compare the microflora of failed implants to those of healthy implants. The failing implants which are treatment planned to be extracted will be collected in the saline right after extraction. Thereafter, microbial analysis on 5-10 failed implants and 5-10 healthy implants will be done via 16s RNA analysis and surface analysis will be carried out via microscope to evaluate the changes. By conducting this research, this will allow us to prepare a specific treatment planned geared for patients who may be at risk for implant failure as well as give a more definitive differential diagnosis that can determine if the true cause of failure was due to peri-implantitis pathogens or due to the corrosive factors of the material used for dental implants.

Electrochemical treatment of infected titanium, an approach for biofilm obliteration

Wenji Cai
McGill University
Faculty of Dentistry

This project will provide a new approach for implant decontamination that offers several advantages over previous methods such as simplicity, low cost, and the ability to treat a wide range of microorganisms forming the pathological biofilm. We hope to eventually develop electrochemical treatments optimized to selectively destroy the pathological biofilms on titanium implants while not affecting the surrounding healthy tissues. To achieve this goal, electrochemical impedance spectroscopy (EIS) will be used to monitor the effect of biofilm growth on the electrical properties of the infected titanium implants or that of the osseointegrated ones. Surface morphology, composition, bacterial load, and electrochemical properties of titanium implants will be analyzed before and after biofilm contamination and subsequent decontamination with various electrochemical methods. The first step will be an in vitro study to define the electrochemical properties of both osseointegrated titanium and contaminated titanium in simulated biological conditions. The second step is an in vivo study to define the electrochemical properties of both osseointegrated titanium and contaminated one after being implanted inside the rat's tibia. The final step is to determine the voltage, amperes, and frequency of the current from in vitro and in vivo results.

In vitro comparison of biofilm formation and the amount of ion leakage on titanium and zirconia implants

Lan-Lin Chiou, DDS
Trustees of Indiana University

This study aims to compare titanium with zirconia implants with regard to the amount of biofilm formation and the concentration of released elements. The first aim of the study is to identify the patterns of biofilm formation on titanium and zirconia implants at different time frames under a four species biofilm model. The second aim is to investigate the concentration of titanium and zirconium elements released from dental implants after bacterial contamination. The third aim is to evaluate the influence of the implant macrostructure on the biofilm formation, comparing macro-thread with micro-thread portion within the same group.

The biofilms will be visualized by CLSM images of stained microorganisms using a LIVE/ DEAD stain. Each biofilm will be scanned at: micro-threads, the coronal portion of the implants; and macro-threads, the portion of the implants below to the micro-threads. The proportion among the different species will be measured by fluorescence in situ hybridization (FISH). Titanium and zirconium elements will be analyzed from bacterial culture medium by using inductively coupled plasma optical emission spectrometry. Outcomes with a single measurement per implant will be analyzed using a two-way ANOVA to examine the effects of implant types and time. Outcomes measured separately in macro-thread and micro thread locations will be analyzed using mixed-model ANOVAs. A 5% significance level will be used for all tests.

The effects of clockwise and counterclockwise conventional and osseodensification drilling on bone dimensions, density and the biomechanical properties

Niloufar Daneshparvar
Trustees of Indiana University, Department of Periodontology

The aim of this study is to compare the effects of conventional implant drills with osseodensifying burs in low-quality bone in terms of changes in bone mineral density, bone implant contact rate, bone expansion, and primary implant stability. The second aim is to compare the amounts of bone expansion achieved between conventional drills and osseodensifying drills when used in both clockwise and counterclockwise.

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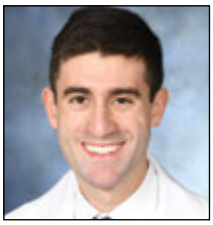
Congratulations to the class of 2020 from the American Academy of Implant Dentistry!

Every year accredited dental programs refer an outstanding pre- and/or post-doctoral dental student who demonstrates great interest, academically and clinically, in implant dentistry. The award serves as recognition of students' achievements, as well as provides the opportunity for the winner to advance their skills and knowledge within the field of implant dentistry. Winners receive complimentary membership and registration to an educational meeting of their choice. Look out for these future dental implantologists!

2020 Dental Student Award Winners

Pre-Doctoral Award



Robert Abdulezer, Université de Montréal

Virginie Boudreau-Larouche, Université Laval

Aaron Compton, DMD, Oregon Health & Science University

Susannah Felton, The Dental College of Georgia, Augusta University

Brian Greco, DMD, University of Connecticut School of Dental Medicine

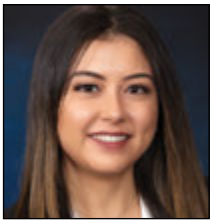
Gerard Guimond, DDS, Creighton University School of Dentistry

Shreya Gupta, DMD, Boston University Henry M. Goldman School of Dental Medicine

Ryan Jin, The Ohio State University College of Dentistry

Madiha Khan, DDS, New York University College of Dentistry

Jane LaPorte, DDS, University of Iowa College of Dentistry and Dental Clinics



Robyna Mamoor, DDS, Stony Brook School of Dental Medicine

Christa Musto, DMD, University of Pittsburgh School of Dental Medicine

Kate Plagenz, DMD, Roseman University College of Dental Medicine

Sukhdeep Sandhu, University of Nevada Las Vegas School of Dental Medicine

Mckenzi Taylor, DDS, University of Missouri-Kansas City

Brendan Wu, Harvard School of Dental Medicine

Riley Allen, DDS, UNC Adams School of Dentistry

Omar Alzein, DDS, University of Minnesota, School of Dentistry

James Amir, DMD, Rutgers School of Dental Medcine

Tejpal Athwal, DDS, Indiana University School of Dentistry

Rebecca Baudin, DDS, West Virginia University School of Dentistry

Yash Boghara, DMD, Temple University Maurice H. Kornberg School of Dentistry

Saahil Brahmbhatt, DDS, Columbia University College of Dental Medicine

Denisse M. Cacho, DMD, University of Louisville School of Dentistry

Ashley Kate Cauthen, DMD, Medical University of South Carolina

Harry Chesser, DDS, University of Colorado School of Dental Medicine

Paige Davis, DMD, Midwestern University

Sarina Priyesh Dodhia, Penn Dental Medicine

Natalie Evans, DDS, University of Washington

David M. Giordano, DDS, University at Buffalo School of Dental Medicine

Jacob Haslam, DDS, University of Utah School of Dentistry

Steven Hernandez, A.T. Still University-Missouri School of Dentistry & Oral Health

Hirut Kassa, DDS, Meharry Medical College

Elizabeth Lucas, University of Mississippi School of Dentistry

Jaiden Mercer, DMD, MPH, Arizona School of Dentistry & Oral Health

Kareem Metwalli, DDS, UT Health San Antonio School of Dentistry

Umair Niazi, Midwestern University College of Dental Medicine

Ashton Parmley, University of Nebraska Medical Center College of Dentistry

Stephen Patterson, DDS, The University of Illinois at Chicago

Jessica Quach, DDS, Virginia Commonwealth University School of Dentistry

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Student Research Grant Applications

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Bony models will be prepared and sectioned into 40 rectangular cubes. Implant osteotomes will be prepared in the bony models, using one of the following techniques:

1. Conventional implant drills in a clockwise direction
2. Conventional implant drills in a counterclockwise direction
3. Osseodensifying drills in clockwise direction
4. Osseodensifying drills in a counterclockwise direction

Primary stability will be assessed after implant installation using an Osstell ISQ probe. A surface scanner will be used for scanning the bony models and superimposed on each other, and the difference between pre- and post-osteotomy measurements will be calculated. The average bone density before and after osteotomy preparation will be compared using a peripheral quantitative computed tomography. The average of bone-implant contact percentage will be compared between the four groups using histologic analysis.

Strain development in bone during insertion of a novel wedge implant

Dr. Tanja Grobecker
Saarland University

While primary stability still constitutes an important factor for implant success, high levels of insertion torque resulting from bone compression are controversial and may constitute a co-factor in peri-implant bone loss. Very recently, wedge-type implants (REX Implants Inc., Columbus, OH, USA) have been introduced in order to solve the problem of narrow alveolar ridges. these implants require site preparation using piezosurgery and placement using an electromechanical surgical mallet. Until now, the level of stress generated during implant insertion as well as the risk of bone damage is unknown for these novel implants. Adhering to the manufacturers' protocols for medium quality bone, implant surgery will be performed in polyurethane foam blocks equipped with strain gauges attached to the buccal and occlusal aspects. A total of 5 conventional round, bone level implants and wedge-type implants will be inserted while monitoring emerging stress in the peri implant region. Resonance frequency analysis will be used for determining primary implant stability resulting from the insertion process. Statistical analysis comparing strain generation during implant insertion and primary stability will be based on ANOVA and Tukey honest differences test (Based on the observations expected, it will be possible to estimate the risk of excessive bone compression during insertion of wedge-type implants.

Tribocorrosion at the implant-abutment interface simulating clinically relevant conditions.

Dr. Apurwa Shukla
University of Illinois at Chicago College of Dentistry, Prosthodontics

The objective of this study is to investigate the potential effect of corrosion debris associated with an acidic oral environment, occlusal loading, and parafunctional habits on implant failure (peri-implantitis). The aim is to determine tribocorrosion processes at the implant-abutment interface with a clinically relevant model that simulates occlusal loading and the erosive, acidic exposure of the oral environment. The proposed work will provide solutions to the prosthetic and biological complications associated with long-term implant therapy.

The apparatus with a tribological contact of "pin-on-disc" configuration, where a reciprocating pin in contact with a disc with conforming geometry and controlled electrochemical conditions. Normal forces are measured directly, and the frictional forces are obtained from the load cell connected with the sample mounting table. The solution chamber is made of polysulphone and holds the artificial saliva and electrodes in position. The tests will undergo cycles at Hz (mastication frequency) and amplitude of ±5pm with a constant load of 50N (average load conditions) and 200N (simulate maximum expected contact stress in the dental implant).

We will be simulating 4 conditions in an oral environment, by varying the contact pressure/load and pH levels. The commonly used dental implant material (Grade IV titanium) and artificial sativa representing the oral environment will be used.

Assessing the effect of the field of view on the accuracy of registration in static computer assisted implant surgery

Dr Ashi Singh
Harvard School of Dental Medicine Restorative Dentistry

The influence of the Field of view of CBCT on the accuracy of registration has to date not been validated. This is a clinical study intending to determine if a small field of view CBCT can be used in virtual implant planning and static computer-aided guided surgery with similar accuracy as a full field of view. This retrospective investigation will involve 20 patient data pairs. This will include the full field of view (FOV) CBCT from the existing DICOM data set in Co-diagnostix and corresponding ST L scans will be taken from Digital Intra-oral scanner (Trios3 ; 3 shape, Copenhagen, Denmark). Small FOV CBCT representations will be digitally created using a software Sante to section a full FOV into three segments: one anterior (canine to canine) and two posterior segments (premolar to molar). A scan body will be placed digitally at predetermined locations in each segment of the master STL using a third party software (Meshmixer). Following this, the master STL will be registered with the Full FOV as well as the small FOV cbct, to investigate the accuracy. Finally, the validation tool in Co-diagnostix will be used to assess the precision of the registration process.

Mineralized synthetic polymer scaffold for cell-free osseous wound healing and periodontal tissue engineering

W. Benton Swanson
Regents of the University of Michigan School of Dentistry

Bone quality and bone amount are strongly correlated with both the short- and long-term success of dental implants. Bioma-

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AMERICAN ACADEMY OF IMPLANT DENTISTRY FOUNDATION

AAID Foundation Awards Two Large Research Grants in 2020

Autologous Fibrin Matrix for Growth Factor Delivery

Daniel Clark, DDS, MS, PhD
University of California San Francisco

Advances in bone regeneration have allowed for the successful rehabilitation of the lost dentition with dental implants. However, challenges remain and there is a clinical need to improve bone regeneration in order to deliver predictable results. One approach has been the use of recombinant human growth factors (rhGFs). Bone morphogenic protein-2 (rhBMP2) is commercially available with FDA clearance for use in the oral cavity. However, current rhGF delivery materials cannot adequately control the location, timing, and quantity of rhGF delivery throughout the regenerative processes.

The long-term objective of this project is to develop a "smart" material that is biologically controlled to release rhGFs during the appropriate cellular and molecular events to improve tissue regeneration, and use the natural properties of fibrin for rhGF delivery. After injury a fibrin matrix forms and binds cellular and proteinaceous components of the blood, including growth factors. As healing proceeds, the fibrin matrix is degraded resulting in the release of the bound growth factors at the appropriate time and location to further stimulate the regenerative processes.

Dentistry has already been introduced to autologous blood products, such as platelet-rich fibrin (PRF), that utilize the beneficial properties of fibrin. We hypothesize that incorporation of rhBMP2 into an autologous fibrin matrix can be produced via a simple chair-side protocol, and the resulting product will be a vehicle for sustained delivery and biologically controlled release of rhBMP2 to be used by clinicians to enhance bone regeneration in the oral cavity.

Soft and Hard Tissue Changes Around Implants Using Customized CAD CAM Healing Abutments

Acela Martinez Luna, DDS, MS
East Carolina University School of Dental Medicine Surgical Sciences

The use of digital protocols that utilize computer-aided design and computer-aided manufacturing (CAD/CAM) technologies has been steadily increasing over the years in the field of implantology. Along with these advancements, the concept of implant success criteria has shifted from implant survival to the creation of life-like implant restorations with natural-looking peri-implant soft tissues. To create a natural appearance of an implant restoration, it is necessary that the soft tissue contours are maintained or reconstructed. Contouring the soft tissue from the surgical phase is possible with the use of customized healing abutments. As compared to standard healing abutments with a circular profile, customized healing abutments allow for a natural emergence profile since the shaped tissues are accurately preserved and transferred to the definitive restoration and can passively accommodate the prosthesis.

Our long-term goal is to generate evidence for the creation of successful implant restorations and ideal supporting tissues in adequate health by utilizing patient-tailored implant protocols such as the use of customized CAD/CAM healing abutments in the posterior molar zone in healed sites.

The specific aims of this proposal are:

1. Measure soft and hard tissue changes around dental implants when customized CAD/CAM healing abutments are utilized as compared to standard healing abutments;
2. Assess different clinical measurements around dental implants to analyze if the use of customized CAD/CAM healing abutments will demonstrate improved plaque control and peri-implant health as compared to standard healing abutments
3. Compare the degree of patient satisfaction using a visual analogue scale (VAS) in patients receiving an implant restoration following the use of a customized CAD/CAM healing abutment as compared to standard healing abutments

Summary of the 2020 Annual Business Meeting

The 2020 Annual Business Meeting of the American Academy of Implant Dentistry (AAID) was called to order by President Bernee Dunson on Saturday, November 14, 2020.

A quorum was present. Following is a summary of the activities, actions, and reports at the meeting.

President Dunson introduced the Board of Trustees:

- Dr. Duke Heller, President-Elect
- Dr. Brian Jackson, Vice President
- Dr. Shane Samy, Treasurer
- Dr. Ed Kusek, Secretary
- Past President's Representative: Dr. Francis DuCoin
- Central District Trustees: Dr. Bill Anderson and Dr. Donald Provenzale
- Northeast District Trustee: Dr. Robert Castracane
- Southern District Trustees: Dr. E. Richard Hughes and Dr. Andrew Kelly
- Western District Trustees: Dr. Christopher Petrush and Dr. Matthew Young

Dr. Dunson also announced the AAID Executive Staff:

- Executive Director: Carolina Hernandez
- Chief Financial Officer: Jamey Richardson
- Parlimentarian: Valoree Althoff
- Chief Legal Counsel, First Amendment and Specialty Issues: Dr. Frank Recker
- General Legal Counsel: Nathan Breen
- Legal Counsel, Minnesota Civil Investigation: Michael Hatch

Dr. Dunson then inducted 11 new Associate Fellow members and 28 new Fellows.

Dr. Dunson observed a moment of reflection in memory of the following members who passed away since the 2019 Annual Business Meeting:

- Fellow Member: Dr. Trevor Bavar, Yonkers, NY
- Life Members: Dr. Michael D. Mooney, Port Charlotte, FL; Dr. Stanley T. Praiss, Haddonfield, NJ; and Dr. Lionel W. Richards, Citrus Heights, CA
- AAID Past President: Dr. Victor Sendax, New York, NY

Dr. John Minichetti, chair of the Nominating Committee, reported that no further nominations had been received, so the slate of officers for 2020-2021 was elected as follows:

- President: Dr. Duke Heller
- President-Elect: Dr. Brian Jackson
- Vice President: Dr. Shane Samy
- Treasurer: Dr. Ed Kusek
- Secretary: Dr. Matt Young

The following reports were delivered:

- The Bylaws Committee presented 12 Amendments to the Bylaws. All 12 Amendments were passed by the voting members. (Refer to Issue 2, 2020 for more detailed information.)
- Dr. Shankar Iyer, chair of the Scientific Committee, thanked committee members for their dedication to making the virtual conference a reality, as well as the Central office staff. There were a total of 80 speakers: 20 Main Podium, 20 Seminars, 9 Mini Clinics, 10 Sponsored Sessions, 4 New Trends, and 22 Team Track. Almost 800 people from 30 countries attended the virtual conference. There were also 33 Exhibitors and 4 Sponsors. He also reported that the virtual platform has a polling feature and will allow the committee to collect data on the outcomes from the scientific meeting. All responses will be gathered and a report will presented to AAID members.
- Treasurer Dr. Shane Samy reported that even within the challenging year, the AAID has weathered the storm financially, but the change from an in-person Annual Conference to a virtual one did impact the overall budget.
- Dr. Brian Jackson reported that the charge of the Legal Oversight Committee (LOC) was expanded in 2020 to include oversight of all legal matters within the AAID. Moving forward, the LOC is responsible for reviewing all legal invoices, verifying legal work, and reporting on the AAID's strategic plan to the Board. The committee has engaged Nathan Breen of Hutton & Howe to serve as General Counsel. Dr. Frank Recker will continue to serve as Chief Legal Counsel, First Amendment and Specialty Issues.
- Dr. Lion Berzin, president of the American Board of Oral Implantology/ Implant Dentistry, briefly reviewed the Board's activities, including the announcement that the 2020 examination was canceled for the first time ever due to COVID-19; as a result, there are no new Diplomates. Currently, the ABOI/ID has 549 Diplomates, 446 of whom are active. The part one written examination is scheduled to be a virtual held at Pearson View testing centers in 2021. The part two face-to-face oral examination has been advanced to July 2021; however, if needed, the ABOI/ID will prepare to conduct those examinations virtually.
- Dr. Larry Bush of the AAID Foundation reported that Smile, Veteran program will continue to expand in 2021.
- Dr. Duke Heller recognized President Dunson for his leadership of the AAID and shared a few words on his goals for the 2021 fiscal year.

newmembers

The AAID is pleased to welcome the following new members who joined between August 13, 2020, and January 27, 2021. The list is organized by state, with the new member's city included. International members are listed by country, province (if applicable), and city. If you joined the AAID recently and your name does not appear below, it will be listed in the next issue of AAID News.

Alaska
Wes Lauderback, Wasilla

Alabama
Andrew Henninger, Madison
Elizabeth Lucas, Birmingham
Samuel McLemore, Birmingham

Arkansas
Evgeny Titov, Fort Smith

Arizona
Nashid Ahmed, Phoenix
Sean Ham, Tucson
Jeannie Ju, Tucson
Joseph Larsen, Oro Valley

California
Alice Ahn, Los Angeles
Saad AlResayes, Loma Linda
Hugo Asurza, Garden Grove
Rajdeep Badwalz, Atwater
Artur Barakazyan, Glendale
Adriana Barrera, Torrance
Elaine Bersaba-Vong, Loma Linda
Christopher Bonin, Huntington Beach
Dan Botoaca, Glendale
Sungjo Justin Choi, Irvine
Alan Chui, Novato
Priscilla Cury Rosa, Anaheim
Madhavi Durvasula, Fairfield
Bashar Fargo, Redlands
Bassam Fargo, Riverside
Trent Gillard, Redlands
Nada Hanna, Loma Linda
Ashley Ho, Hercules
Diary Hoshiyar, Corona
Samer Itani, San Francisco
Eunice Jong, San Ramon
Ryan Kearbey, Oroville
Thanos Kristallis, La Jolla
James Lee, Manhattan Beach
Enrique Lewin, Rancho Cucamonga
Cecilia Miranda-Oglesby, Banning
Jenny Najjar, Loma Linda
Tiffany Nguyen, San Francisco
Tuan Nguyen, Placentia
Brian Olvera, Los Angeles
Deborah Owen, Laguna Hills
Timothy Park, Fullerton
Alexander Phillips, Covina
Shorouq Sahawneh, Costa Mesa
Dhwani Shah, Chino
Ashley Shaheri, Los Angeles
Vinni Singh, San Jose
Yara Soto Solis, San Diego
Meera Sravan Kumar, San Jose
Jeanette Thai, Lake Forest
Leanna Ursales, Gonzales
Hilda Yacoub-Fokas, Yucaipa
Parnell Yao, Chino
Layth Yaseen, Brea
Mohammad Zareh, Los Angeles

Colorado
Ye Shi, Denver
Elija Voyich, Craig

Connecticut
Brendan Dolan, Wethersfield

Florida
Edward Abreu, Brandon
Orlando Diaz Valle, Miami
Cameron Johnson, Sarasota
Anna Krizan Fano, Ft Myers
Rafael Martinez, Davie
Alexandra Ortiz Javier, Boynton Beach
Rishit Patel, Lady Lakes
Arturo Perez, Lutz
Charles Poblenz, Jacksonville
Luis Rodriguez, Gainesville
McKenzi Taylor, St. Petersburg

Georgia
Terry Lemons, Cumming
Joseph Weber, Gainesville
Miles Katahara, Kahului

Idaho
David Cantwell, Boise
Wade Pilling, Meridian

Illinois
Matthew Nye, Chicago
Stephen Patterson, Chicago
Colleen Scheive, Glen Ellyn
Nidhi Shah, Chicago
Kristina Varga, Lincolnwood

Indiana
Benjamin Evans, Indianapolis
Olga Malukova, Fishers
Bryce Richardson, Indianapolis

Kansas
Ryan Bucher, Olathe
Gerard Guimond, Wichita

Kentucky
Aaron Wilson, Louisville

Louisiana
Vincent Williams, Sulphur

Massachusetts
Oliver Austria, Dracut
Tirgan Avetisyan, Lowell
Riya Bandekar, Boston
Mohamed Butt, Somerville
Jessica Cheng, Lexington
Kyle Coppola, Lexington
Amirali Fattahi, Brookline
Denis Jakuj, North Andover
Adam Marengi, Woburn
Maria Paz, Boson
Richard Senatore, Boston
Mina Zaki, Framingham

Maine
Lucas Homicz, Cape Elizabeth
Alexander Katanov, South Paris
Dustin Nadeau, Newport

Michigan
Jason Baker, Okemos
Corey Cook, Okemos
Matthew Ferguson, Montague
Daryl Moseley, Southfield
Umair Niazi, Bloomfield Hills
Shannon Young, Ann Arbor

Minnesota
John Keller, Andover
Jane LaPorte, Prior Lake
Steven Sarles, Prior Lake
Bradley Sim, Saint Cloud
Dustin White, Albertville

North Dakota
Joshua Grenier, Minot AFB

Nebraska
Jessica Arland, Lincoln

New Hampshire
Sukdev Singh, Milford
Erik Young, Derry

New Jersey
James Amir, Washington Township
Preeti Iyer, Elizabeth
Yuri Souza Borges, Perth Amboy

New Mexico
Keon Ahghar, Roswell
Sarah Usher, Roswell

Nevada
Tim Adams, Reno
Thanh Ngo, Las Vegas

New York
Omar Alzein, Syracuse
Wynatte Chu, New York
William Dangelo, Lackawanna
Rush Hejazi, Rush
Aaron Jordan, Yorktown Heights
Michael Leung, Brooklyn
Robyna Mamoor, West Islip
Shu Ping Rong, New York
Matthew Rossen, North Tonawanda
Sonya Shafique, New York
Stacey Starkes, Canandaigua

Ohio
Ryan Jin, Cincinnati
Gregory Snevel, Wickliffe

Oregon
Aaron Compton, Hillsboro
R. McEntire, Pendleton
Nathan Snyder, Salem
Angela Toy, Newberg

Pennsylvania
John Gilliland, Long Pond
Edward Lee, Philadelphia

South Carolina
Mark Burns, West Columbia
Eberechukwu Njoku, Greenville
Kane Ramsey, Hilton Head Island
Sheryl Voulgaropoulos, Clover

Tennessee
Bostros Aiyad, Nashville
Jeffrey McKnight, Knoxville
Kevin Shepherd, Knoxville

Texas
Rusul Rabeeah Al-Khuzaie, Austin
Michel Azer, Houston
Hemanth Kunduru, Tyler
AnnaLynn Pappas, Allen
Richard Perez, Grapevine
Kishore Sama, Pflugerville
Maged Shokralla, Houston
Christopher Stevenson, Dallas

Virginia
Anthony Castellano, Richmond
Chih Ping Tsai, McLean

Vermont
Ushma Vyas, Chester

Washington
Susannah Bohannon, Olympia
Javaid Chaudhry, Bellevue
Garth Hatch, Kennewick
Danny Koo, Seattle
Chad Olinger, Seattle
Russell Rogers, Lacey
Eric Wagar, Renton

Wisconsin
Madiha Khan, Brookfield
Casey Messer, De Pere
Muhammad Omari, Milwaukee
Alexandra Sargent, Pleasant Prairie

West Virginia
Katherine Simmons, Bridgeport

CANADA

Alberta
Kirsten Hooper, Calgary

British Columbia
Ashkan Afshinkia, Penticton
Abdulelah Aldahlawi, Vancouver
Ali Bakhshi, Pitt Meadows
Ebenezer Boaz, Massett
Shah Bozorgi, Chilliwack
Gerry Chahal, Port Coquitlam
Heather Cooke, Duncan
Neelkamal Duggal, North Vancouver
Gisèle Fouellefack, Pitt Meadows
Matt Francisco, Abbotsford
Douglas Lindley, Prince Rupert
Ishtpreet Mangat, Surrey
Sowmya Parasuraman, Surrey
James Peng, Surrey
Melody Sun, Coquitlam
Stephen Wong, Burnaby
Yi Xing, New Westminster
Royce Yang, Richmond
Trevor Zlatnik, Kamloops

Ontario
Warda Chekh Akhmad, Ottawa
Manoj Kumar Sundar, Scarborough

Quebec
Virginie Boudreau-Larouche,
Dolbeau-Mistassini

INTERNATIONAL

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Azher Al-Abedi

Brazil
Luiz Carlos Magno Filho, Sao Paulo

Egypt
Ahmed Abdelkreem
Haytham El-Khouly

Ireland
Alice Cleary

Korea
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Hyun Jun Kim

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Phone: 609-314-1649
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Phone: 801-878-1257

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Assistant Director: Shankar Iyer, DDS, MDS FAAID, DABOI/ID
Contact: Janice Gibbs-Reed, MA
Email: gibbs@sdm.rutgers.edu
Phone: 973-972-6561
Website: sdm.rutgers.edu/cde/maxi-course

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Director: O. Hilt Tatum, DDS, FAAID DABOI/ID
Assistant Director: Jose Pedroza, DMD, MSC
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Phone: 787-642-2708
Website: www.theadii.com

Vancouver AAID MaxiCourse®
Vancouver, BC
Director: William Liang, DMD, FAAID, DABOI/ID
Contact: Andrew Gillies
Email: andrew@implant.ca
Phone: 604-330-9933
Website: www.vancouvermaxicourse.com

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Waterloo, Ontario
Director: Rod Stewart, DDS, FAAID, DABOI/ID
Assistant Director: George Arvanitis, DDS, FAAID, DABOI/ID
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Email: info@timaxinstitute.com
Phone: 905-235-1006
Website: www.timaxinstitute.com

Dental Student Award Winners

continued from page 32

Hayden Rathel, DMD, University of Alabama School of Dentistry
Luke Revelt, DMD, Southern Illinois University School of Dental Medicine
Katherine Sayler, DDS, Loma Linda University School of Dentistry
Sonya Shafique, DMD, Tufts University School of Dental Medicine
Jonathan Swope, DDS, Texas A&M, College of Dentistry
Victoria Turner, DDS, The University of Texas School of Dentistry in Houston
Jake Wuerch, The University of British Columbia
Drew Young, DDS, The University of Alberta
Shannon Young, University of Michigan School of Dentistry

Post-Doctoral

Alex Chu, DDS, University of Tennessee Health Science Center
Kirsten Hooper, University of Saskatchewan, College of Dentistry
AnnMarie Lyon, DMD, University of Kentucky College of Dentistry
Madelyne Salo, DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry
Benjamin C. Shepperd, DMD, University of Florida College of Dentistry
Jonathan A. Wirth, DDS, Marquette University School of Dentistry

New Members

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Kuwait
Abrar Al Ageil

Saudi Arabia
Nasser Alnasser
Salma Elhassan
Wael Kassab
Jung Hoon Bae
Young Uk Jung
Sung Jin Kim
Kangnam Park
Sangho Park
Jaeyong Yang

United Arab Emirates
Mustafa Abdelaal, Abu Dhabi
Rami Alahmar, Abu Dhabi
Reem Almasalmeh, Abu Dhabi
Sara Alsaleemi, Abu Dhabi
Maha Amer, Abu Dhabi
Khan Mohammed Atif, Abu Dhabi
Mustafa Eldeweini, Abu Dhabi
Yehsana Farees, Abu Dhabi
Wael Hassan, Abu Dhabi
Duha Kareem, Abu Dhabi
Ahmad Khassati, Abu Dhabi
Abdul Rahman Khir Allah, Abu Dhabi
Mohamed Matar, Abu Dhabi
Hana Mohamed, Abu Dhabi
Hassan Nassif, Abu Dhabi
Waleed Nazzal, Abu Dhabi
Sweta Prabhu, Dubai
Madhuri Priyadarshini, Abu Dhabi
Mazin Samer, Abu Dhabi
Moh Majed Sharfo, Abu Dhabi
Rawda Sheffa, Abu Dhabi
Outdat Tamer, Abu Dhabi

New Student Members
Omar Alzein
James Amir
Jessica Arland
Rajdeep Singh Badwalz
Virginie Boudreau-Larouche
Aaron G. Compton
Benjamin Robert Evans
Gerard C. Guimond
Kirsten Hooper
Ryan Jin
Madiha F. Khan
Jane LaPorte
Elizabeth Lucas
Olga Malukova
Robyna Mamoor
Umair T. Niazi
Kangnam Park
Stephen Patterson
Maria Paz
Bryce Richardson
Alexandra Sargent
Sonya Shafique
Yuri L. Souza Borges
McKenzi Marie Taylor
Aaron Hugh Wilson
Erik Young

AAID Active Study Clubs*

United States

AAID Bergen County Dental Implant Study Group
Location: Englewood, NJ
Director: John Minichetti, DMD
Contact: Lisa McCabe
Phone: 201-926-0619
Email: lisapmccabe@gmail.com
Website: https://bit.ly/2rwf9hc

Acadiana Southern Society
Location: Lafayette, LA
Director: Danny Domingue, DDS
Phone: 337-243-0114
Email: danny@jeromesmithdds.com
Website: www.acadianasouthernsociety.com/upcoming-meetings.html

Alabama Implant Study Club
Location: Brentwood, TN
President: Michael Dagostino, DDS
Contact: Sonia Smithson, DDS
Phone: (615) 337-0008
Email: aisgadmin@comcast.net
Website: www.alabamaimplant.org

Bay Area Implant Synergy Study Group
Location: San Francisco, CA
Director: Matthew Young, DDS
Phone: 415-392-8611
Email: young.mattdds@gmail.com
Website: http://youngdentalsf.com

Calderon Institute Study Club
Location: Queens, NY /Oceanside, NY
Director: Mike E. Calderón, DDS
Contact: Andrianna Acosta
Phone: 631-328-5050
Email: calderoninstitute@gmail.com
Website: www.calderoninstitute.com

CNY Implant Study Club
Location: 2534 Genesee street. Utica, NY
Director: Brian J Jackson, DDS
Contact: Tatyana Lyubezhanina, Judy Hathaway
Phone: (315) 724-5141
Email: bjjddsimplant@aol.com
Website:wwwbrianjjacksondds.com

Hawaii Dental Implant Study Club
Location: Honolulu, HI
Director: Michael Nishime, DDS
Contact: Kendra Wong
Phone: 808-732-0291
Email: mnishimedds@gmail.com
Website: www.honoluludentaloffice.com

Hughes Dental Implant Institute and Study Club
Location: Sterling, VA
Director: Richard E. Hughes, DDS
Contact: Victoria Artola
Phone: 703-444-1152
Email: dentalimplant201@gmail.com
Website: http://www.erhughesdds.com/

Implant Study Club of North Carolina
Location: Clemmons, NC
Director: Andrew Kelly, DDS
Contact: Shirley Kelly
Phone: 336-414-3910
Email: shirley@dentalofficesolutions.com
Website: www.dentalofficsolutions.com

Mid-Florida Implant Study Group
Location: Orlando, FL
Director: Rajiv Patel, BDS, MDS
Contact: Director
Phone: 386-738-2006
Email: drpatel@delandimplants.com
Website: http://www.delandimplants.com/

SMILE USA® Center for Educational Excellence Study Club
Location: Elizabeth, NJ
Director: Shankar Iyer, DDS, MDS
Contact: Terri Baker
Phone: 908-527-8880
Email: dentalimplant201@gmail.com
Website: http://malosmileusaelizabeth.com

Canada

Vancouver Implant Continuum
Location: Surrey, BC, Canada
Director: William Liang, DMD
Contact: Andrew Gillies
Phone: 604-330-9933
Email: andrew@implant.ca
Website: www.implant.ca

International

Aichi Implant Center
Location: Nagoya, Aichi-Ken, Japan
Director: Yasunori Hotta, DDS, PhD
Phone: 052-794-8188
Email: hotta-dc@ff.iij4u.or.jp
Website: www.hotta-dc.com

Beirut AAID Study Club
Location: Beirut, Lebanon
Director: Joe Jihad Abdallah, BDS, MScD
Phone: 961-174-7650
Email: beirutidc@hotmail.com
Website: http://www.beirutidc.com

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Dr. John C. Minichetti
Contact: Sarah Rock
Phone: 201-731-3239
Email: sarah.englewooddental@gmail.com
Website: https://www.dentalimplantlearningcenter.com/ce-courses/register-online/

California Implant Institute
Dr. Louie Al-Faraje, Academic Chairman
Phone:858-496-0574
Email: info@implanteducation.net
Website: http://www.implanteducation.net/

Cancun Implant Institute: Comprehensive Oral Surgery Training for Modern Dental and Implant Practice
Dr. Joseph Leonetti & Dr. Bart Silverman
Emails: Jal3658@aol.com
Bsilver293@aol.com
Phone: 1-800-757-1202
Website: https://cancunimplantinstitute.org/

Connecticut Dental Implant Institute Manchester, CT
Various Courses available
Dr. Joel L. Rosenlicht
Contact: Michelle Marcil
Email: michelle@jawfixers.com
Website: www.jawfixers.com

East Coast Implant Institute Implant Complications: A 25 Year Retrospective Review
Dr. Brian J. Jackson
Contact: Jana Selimovic
Phone: 315-922-2176
Email: education@bostonmaxicourse.com
Website:http://eastcoastimplantinst.com/upcoming-courses/

Implants in Black and White
Dr. Daniel Domingue
Dr. Jerome Smith
Contact: Maggie Brouillette
Phone: 337-235-1523
Email: maggie@jeromesmithdds.com
Website: http://blackwhiteimplants.weebly.com

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Email: pgdasrilanka@gmail.com
Contact: Dr. Ahmed Shugey, Malaysia
Email: shugey64@gmail.com
Website www.smileusacourses.com

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Dr. Michael A. Pikos
Soft Tissue Grafting Sinus Grafting Alveolar Ridge Strategies: Single Tooth to Full-Arch Fully Guided Full-Arch Immediate Implant Reconstruction Contact: Alison Thiede
Phone: 727-781-0491
Email: learn@pikosInstitute.com
Website: www.pikosinstitute.com/programs-and-courses/coursecontinuum-overview/

Stanley Institute for Comprehensive Dentistry
Dr. Robert Stanley
Contact: Megan Carr, Interim Director of Continuing Education
Phone: 919-415-0061
Email: megan@stanleyinstitute.com
Website: https://stanleyinstitute.com/

Canada

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Email: coriemanager@gmail.com
Phone: 1-780-349-6700
Website: http://www.westernimplanttraining. com/

Pacific Implant and Digital Dentistry Institute
Dr. Ron Zokol
Contacts: Barbara Cox and Dr. FarajEdher
Emails: barbara.cox@ddidental.com
faraj.edher@ddidental.com
Website: www.ddidental.com

Toronto Implant Academy
Dr. Emil LA Svoboda
Taming The Old Dragons of Implant Prosthetics-3 Part Virtual Webinar Series
Contact: Christine Wade, Communications Officer
Phone: 416-432-9800
Email: www.reversemargin.com
Link for AAID Group: https://www.reversemargin.com/aaid_guest_ access/
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Student Research Grant Applications

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terials-based bone regeneration is promising to circumvent shortcomings of bone grafting. Recently, progress in the field of guided bone regeneration demonstrates the role of both physical and chemical cues in biomaterial scaffolds to guide bone regeneration. Synthetic biomaterials which mimic the advantageous properties of collagen are desirable for their tunable properties, large-scale manufacturing potential, batch-to-batch consistency, as well as chemical functionality. Poly (spriolactams), notably polylactic acid (PLA), are among the most widely used synthetic biomaterials approved by the U.S. Food and Drug Administration for biocompatibility and predictable biodegradation; however, due to their chemical structure, these materials commonly used to fabricate tissue engineering scaffolds lack inherent chemical functionality to increase biologic specificity and functionality in inducing tissue fate necessary for efficient and predictable GBR.

We have developed a novel small molecule initiator which allows for the synthesis and incorporation of functional polymer moieties into the bulk structure of PLA, polycaprolactone (PCL), polyglycolic acid (PGA), and their copolymers to achieve GBR. Using this recently invented technology, we propose the synthesis and fabrication of three-dimensional scaffolds for guided bone regeneration which mimics the mineralized fibrous extracellular matrix of bone.

The overall therapeutic goal of this project is to exploit the regenerative capacity of endogenous mesenchymal stem cells by mimicking the extracellular matrix of resorbed bone with a polymeric tissue engineering construct through novel synthetic strategies. The outcomes of the proposed experiments will demonstrate a means for biomaterial mediated craniofacial bone regeneration without stem cell transplantation using an efficient platform for inducing osteogenic cell fate specification. Tissue engineering strategies which are cost-effective, easily stored, and widely adapted to a variety of patient needs to induce predictable, reproducible guided bone regeneration outcomes are highly desirable.

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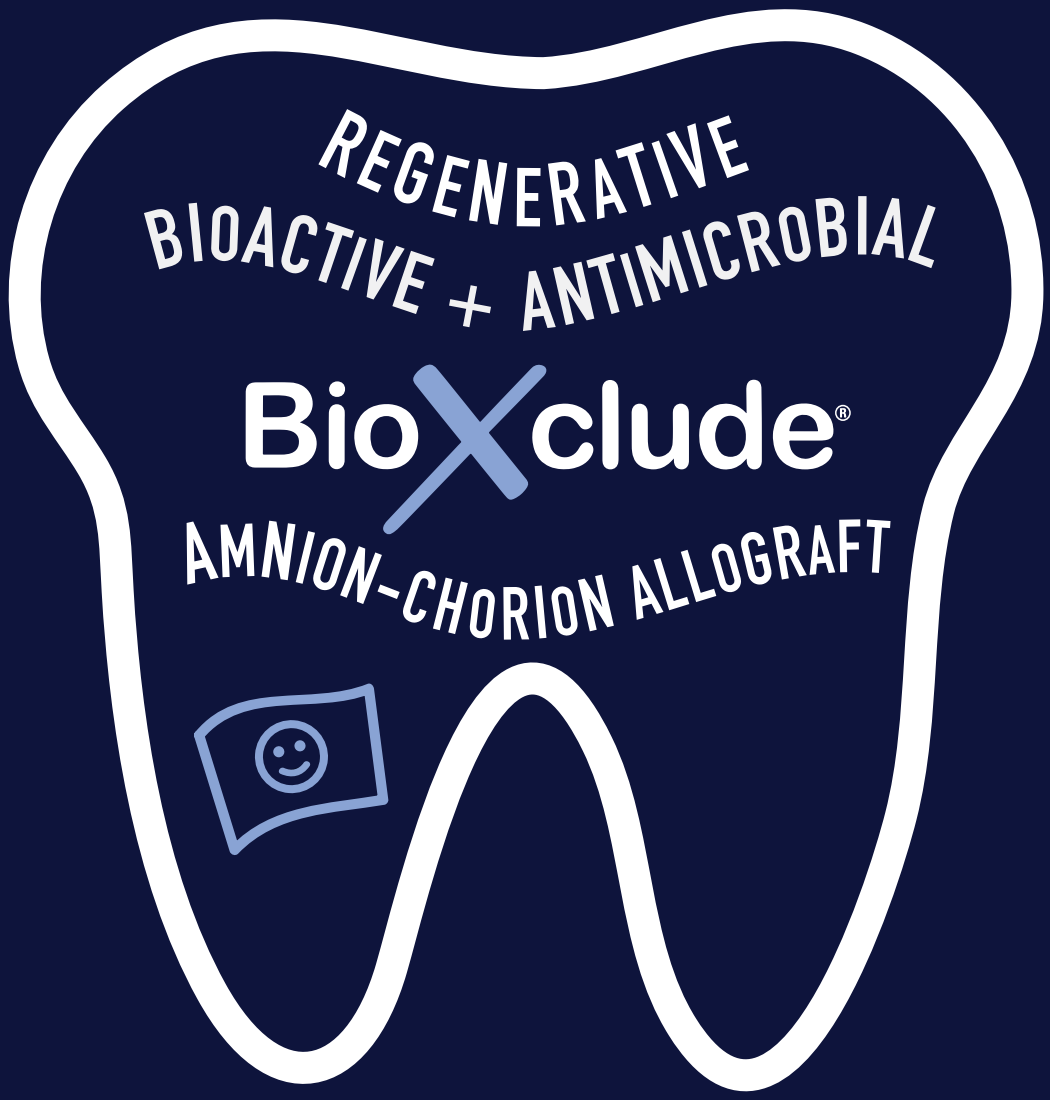

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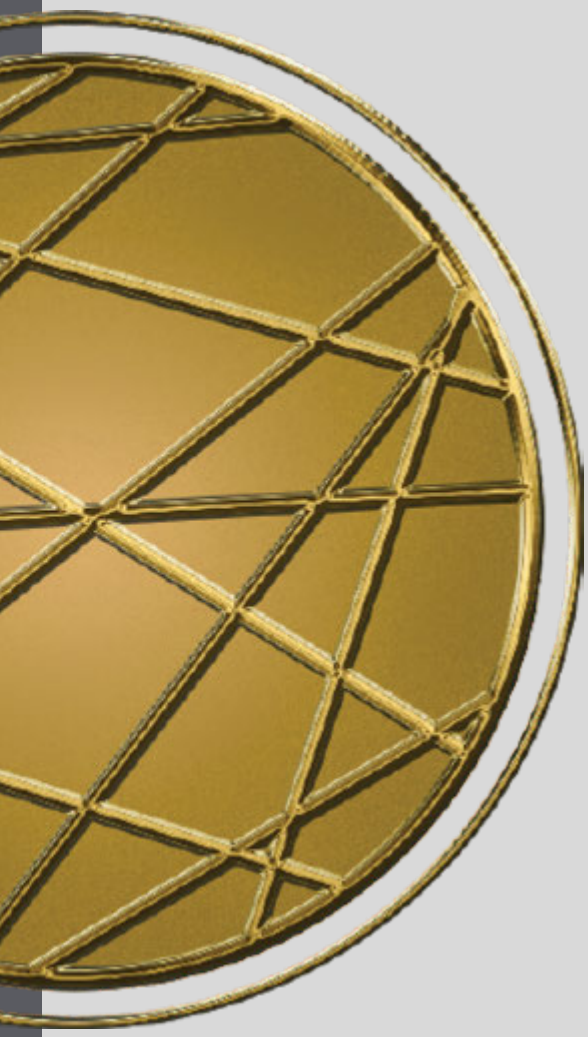

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